

# **Management Discussion and Analysis**

For The Year Ended September 30, 2015

The following discussion and analysis as of January 28, 2016 should be read in conjunction with the Consolidated Financial Statements of Eguana Technologies Ltd. ("Eguana", or the "Company") and notes for the year ended September 30, 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 <u>www.sedar.com</u> and on our website at <u>www.eguanatech.com</u>. 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 National Instruments and other relevant 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 forwardlooking information should not be unduly relied upon.

In particular we include: statements on the future dynamics and size of the solar PV and energy storage market and segments thereof; statements concerning our expectations of future relationships as well as the size of the market for power electronics; statements concerning our sales; and statements concerning factors which we believe may be relevant in assessing whether our plans are achievable.

Our conclusions concerning the size of the addressable solar PV and energy storage markets are based on certain critical assumptions and general conclusions concerning the future of these industries the market segmentation, and emerging market dynamics.

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.

# Strategic Overview

Our goal is to become the #1 provider of power control and power conversion functionality for smart grid energy storage in residential and small commercial applications. We measure this as a 30% market share in each of the target markets. To achieve this goal we will continue to work through non-exclusive strategic relationships with companies that have the capability in terms of technology, market presence and selling channels to move our PCS products in high volume. During 2016, we will focus on three primary markets, the United States, Europe, and Japan.

Our strategy is to deliver a "plug and play" hardware solution that our customers need to connect the batteries to their customers using their own customer gateways. We have two product strategies based on the same core power electronics that can be integrated with multiple battery technologies for multiple applications including single phase and three phase configurations.

Our primary customers include battery manufacturers, solar PV installers, renewable energy equipment aggregators, and energy service companies, which have channels and have developed or acquired the technology network ("information network") to interface with the consumer.

We have designed our manufacturing model to outsource manufacturing of interchangeable sub-assemblies to qualified sub-contractors around the world with the ability to locate final assembly and testing facilities of the finished product close to our customers. We are able to quickly ramp production in response to changing demand conditions without significant capital investment in plant and equipment.

Our business model is designed to lever our core competencies in power electronic design and supply chain management to drive revenues in each of the major markets without material increases in capital investment or operating costs. We believe that we can achieve above average earnings on product sales revenues as the industry grows.

## Operations

We supply our Bi-Direx PCS functionality under two different strategies, depending on the strategy of the partner for the customer application:

## OEM Bi-Direx Sales:

Our OEM business encompasses sales of critical power conversion and control components to a manufacturer of integrated energy storage systems. The components are delivered as subassemblies, ready for mechanical integration into the customer's product enclosures. The subassemblies are produced at qualified global suppliers and delivered to our customers' production facilities as required to support their volume ramp.

Our OEM Customers are battery pack manufacturers, advanced battery technology manufacturers, or technology integrators who sell their own integrated products for stationary energy storage applications.

#### AC Battery Sales:

An AC Battery is an integrated and certified combination of the Bi-Direx PCS and Battery including the battery management system ("BMS") but excluding the customer gateway or supervisory controller. The AC Battery is turnkey energy storage appliance that requires only a grid connection and a dispatch signal to provide a fully functional and durable energy storage installation. This strategy is targeted at productized applications for battery modules from tier 1 lithium battery manufacturers. Our model for this segment is to develop and certify an AC Battery based on batteries selected and approved for the application by a broad segment of the market, and then to manufacture and sell the complete AC Battery appliance minus the batteries to the customer. In certain cases, we will also install the battery on behalf of the customer charging a fee for final integration assembly and testing.

We manage our operations through a Sales and Operations ("S&OP") planning process which updates our assessment of market conditions monthly, measures and aligns our operations across the same period, and adjusts our production, capacity, and financial plans to match anticipated changes to the demand mix. Our S&OP process enables us to maintain optimal inventory positions, manage capacity and capital while minimizing financial risk to the company.

#### Management Discussion of 2015 Operating Results

#### Overview

During 2015, we devoted most of our operational and engineering resources towards supporting our primary customer in Europe to redesign its Comfort series product for the German residential solar self-consumption market. This included support for integration of our Bi-Direx PCS sub-assemblies into the finished Sonnenbatterie products, developing product enhancements to simplify and de-risk field installation and developing an integrated supply chain. During this period, Sonnenbatterie successfully introduced the "ECO" - a more reliable high volume product utilizing the same Bi-Direx platform in the original Sonnenbatterie Comfort series of product.

During 2015, we shifted the bulk of our business development resources to defining market channels and customers in the United States. Our initial strategy was to target battery technology developers and solar installation companies to establish Eguana as the technology leader in these sectors. We believe that we were successful, and that most of the industry now recognizes Eguana's technology leadership in the lower power ratings.

More importantly, however, our expectations for the US market shifted considerably during 2015. We entered the year with the view that the residential segment would be limited to high end back up power systems; however, it has become clear that demand will be driven by a combination of grid quality issues and solar self-consumption and will be larger than anticipated. These expectations are discussed under the heading "Management's Discussion of Outlook and Priorities."

## New Product Development

During fiscal 2015, we focused our engineering resources to developing AC Battery platforms for the US market. A 5kW single phase AC Battery targets the residential market; and a 15kW three-phase AC Battery targets commercial and light industrial market. Along with the US products development, we started development of additional products for Europe. Near term, development plans also include certification of our products for the Australian, and UK markets.

Each AC Battery platform is agnostic to the battery technology, and the final integration process is reduced to a simple software integration between the Bi-Direx PCS control software and the control software of the battery management system.

We also devoted resources to creating greater safety controls to provide protective limits to potential misuse of the batteries to work in conjunction with the battery management systems.

#### Product Sales Revenues and Margins

Total revenue from product sales and services increased from \$2,284,764 in fiscal 2014 to \$6,007,008 in fiscal 2015 representing a 163% increase or \$3,722,244. By comparison, our revenue from product sales and services in 2013 was \$376,526.

The Company had a negative gross margin of \$2,126,760. \$931,263 of the negative gross margin was due to the Company's decision to write-down all remaining solar PV material and inventories related to the cancellation of our primary supply contract in Europe. An additional \$320,000 of inventory not specifically tied to open orders has been written down; the Company is in advanced discussions with multiple European players for the sale of these inventories. \$661,966 was attributable to supply chain issues including expediting costs \$394,719 and rework costs associated with quality defects from our prior magnetic supplier \$267,247. We have engaged legal counsel to review our case against Sonnenbatterrie and were advised that we have a strong case to recover a significant portion of these costs.

The transition to the value added integrated AC Battery in the US market and a lower cost structure driven by a change to global contract manufacturing partners is anticipated to deliver improved margins.

## **Operating Costs**

Operating costs have remained steady year over year, notwithstanding changes during 2015 in our quarterly volumes along with completing the initial products for the US market. A significant contribution to the operating costs in 2015 also went to supporting the redesign of Sonnenbatterie's second-generation product line Eco. The redesign of Eco utilized our standard Bi-Direx PCS from the previous Comfort series with an improved electrical system design for the product.

- Operating costs were \$640,368 down \$84,677 (12%) from \$725,045 in 2014. These costs are mainly
  associated with supply chain management related to production for Sonnenbatterie. Included in this
  amount are salaries and benefits of employees directly allocated to this function, direct costs incurred to
  support production in Germany and 100% of our COO's compensation.
- Product development costs were \$729,360 in 2015 down \$222,214 (23%) from \$950,574 in 2014. Included in product development costs are the costs associated with the product development process, market analysis in support of new product definition, salaries and benefits of our entire engineering group, and 100% of our CTO's compensation.
- We increased our investment in selling and marketing again in 2015 by \$183,008 (33%) to \$731,416 from \$548,408 for the same period in 2014. Included in these costs are salaries and benefits of personnel employed in marketing and customer account relationships travel and costs and costs of trade shows.
- G&A remained flat to prior year increasing by \$37,400 (2%) to \$1,717,869 from \$1,680,469 in 2014. G&A expense consists primarily of salaries, (including the value of stock options for all employees) employee benefits and overhead expenses that are not otherwise allocated to the earlier categories, including those related to corporate maintenance charges, occupancy, all professional fees, investor relations fees and travel costs.
- Settlement expense of \$642,958 (2014 nil), included in a Settlement Agreement in August 2015 with its former CEO, who is also a director of the Company, under which the Company agreed to pay deferred compensation earned by the CEO since 2010 in equal monthly payments of \$13,115 without interest over a period of 82 months beginning October 1, 2015. The Company settled a contingent liability subsequent to year end with a third party who provided consulting services in 1998 to a subsidiary of the Company for a discounted value of \$141,000.

Bad debt expense for fiscal 2015 was \$1,770,710 (2014 – nil) in respect of receivables from our prior customer Sonnenbatterie and from the collection of VAT in Spain. The majority of the bad debt expense reflects the uncertainty caused by the disputes with Sonnenbatterie, uncertainty around the timing of payment and Sonnenbatterie's ability to pay in the case of a favorable outcome for Eguana. However, the bad debt expense is not an admission of agreement with Sonnenbatterie's claims. The Company has retained counsel who upon review of the information provided, have advised the Company to seek the full amount of the receivable as well as additional costs incurred because of certain actions of Sonnenbatterie. The total claim against Sonnenbatterie is approximately C\$3.7 million.

# Management Discussion of Outlook for 2016

Eguana remains well positioned to benefit from the growth in the distributed energy generation markets in the US, Europe, and Japan. Our expectation is to see continued year over year revenue growth. Our strategy is to create four distinct sales channels in the US market, replace lost European volumes in 2016, and finalize a partnership in Japan to position the Company for rapid growth driven by Japanese market deregulation in 2017.

Bi-Direx is recognized across the industry as a leader in its power ratings and one of the only power control systems standardized and certified for North American and European markets with Australia and the United Kingdom on track for the second quarter 2016. The technology meets all grid connection regulations for these markets, is field tested and proven with thousands of installations in Europe and the US.

# United States

Our US strategy is to distribute the AC Battery through four defined channels (solar installers, aggregators, electrical distributors, utilities). Our initial market focus will be Hawaii where we are positioned to take significant market share. The region has both primary solar storage market drivers: high electricity costs driving customer self-consumption and grid instability due to high residential solar penetration. Utility grid stabilization is required because of the high penetration of residential rooftop solar and each installed system must come with a utility (HECO) approved device. Our AC Battery has met all utility thresholds and is currently the only approved power control platform for home energy storage. We believe that other US utilities and regulators especially in California, which is seeing some of the same grid imbalance issues as HECO in pockets across the State, will closely watch HECO's experience.

The Company has begun shipping demonstration orders to partners in each of our targeted channels. The LG Chem AC Battery is in production and was shipped to our Hawaiian partner in fiscal Q1 with further installations planned beginning in February 2016. We expect steady growth to follow as other regions follow the Hawaii model.

## Europe

We are targeting volume recovery in Europe in calendar 2016 among customers spread across automotive storage entrants, battery companies, storage integrators, and utilities. Our Bi-Direx sub assembly platform has the flexibility, efficiency, and easy integration features to attract world-class partners. The Company is currently in advanced discussions with key customers in each segment. Our expectation is to reestablish Bi-Direx as the leading power controls solution for the European market. Selling markets include Germany, Italy, Spain, and the United Kingdom.

#### Japan

In 2015, the Company executed a non-exclusive sales and marketing contract with the Itochu Corporation to globally promote and sell the AC Battery and Bi-Direx platforms. In 2016, our expectation is to complete a commercial product for Japan (Q2, 2016) with general availability by Q3. Itochu has surfaced potential customers and advanced discussions are ongoing.

## **Management Discussion of Financial Results**

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICY CHOICES

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

#### Net Loss and Comprehensive Loss

Our Net Loss for the year ended September 30, 2015 was \$8,788,807 an increase of \$1,628,664 over the Net Loss of \$7,160,143 in 2014. The net loss was impacted materially due to:

- Settlements of \$642,958
- Bad debt expense of \$1,770,710
- Impairment of inventory \$1,251,263
- Expediting expense and rework costs \$661,966

## Sales and Gross Margin

Total revenue from product sales and services increased by \$3,722,244 to \$6,007,008 in 2015 from \$2,284,764 in 2014. Sales in both years were primarily to Sonnenbatterie. Sales decreased in Q4 2015 when compared to the previous quarters in the year due to the loss of this customer.

Margins were impacted negatively by the impairment of the PV Solar and European inventory of \$1,251,263 and expediting and rework costs of \$661,966.

Product pricing on sales in the US including OEM model sales were in line with industry standards although the volumes were not consequential.

	2015				2014			
	Qtr 4	Qtr 3	Qtr 2	Qtr 1	Qtr 4	Qtr 3	Qtr 2	Qtr 1
Sales	1,367,075	1,552,853	1,545,575	1,541,505	921,639	477,419	396,357	489,349
Net (loss)	(4,587,408)	(1,376,971)	(1,328,286)	(1,496,142)	(3,070,391)	(1,536,377)	(489,286)	(2,051,222)
Per share – basic and diluted	(0.05)	(0.02)	(0.02)	(0.03)	(0.06)	(0.05)	(0.02)	(0.08)

#### Summary of Quarterly Results

Summary of Annual Information

	2015	2014	2013	
Revenues	6,007,008	2,284,764	376,526	
Net loss	(8,788,807)	(7,147,276)	(8,256,988)	
Per share – basic and diluted	(0.10)	(0.22)	(0.39)	
Total assets	4,875,815	5,804,815	2,930,111	
Non-current liabilities	1,829,356	1,870,595	4,823,560	
Declared dividends	-	-	-	

## Liquidity and Capital Resources

Liquidity, as measured by working capital deficiency, decreased by \$3,387,631 to (\$1,954,733) at September 30, 2015 by comparison to (\$5,342,364) at September 30, 2014. The change from September 30, 2014 was primarily attributable to the conversion of the First Preferred Shares into Common Shares and equity raises in Q1 and Q4 totaling \$8,648,871.

The Company is in a dispute with our prior customer Sonnenbatterie because of the cancellation of a supply contract. Based on the advice of counsel we will commence litigation during this Quarter to recover \$3.7 million. Litigation is inherently uncertain and while our legal counsel advises that we have a strong case, we are carrying the receivable on our books at near zero.

Sonnenbatterie in return has made warranty claims against the company related to field failures of the first generation 3-phase Comfort series product. We believe that this claim is without merit and that the failures are tied to fundamental system design failures for which Sonnenbatterie was solely responsible. These failures were pointed out to Sonnenbatterie, which was advised not to ship systems without rectification of the design flaws. Legal counsel advises the Company that the Sonnenbatterie decision to ship in spite of warnings voids any warranty claim.

With support from our largest investor Doughty Hanson Technology Ventures ("DHTV") in the form of a Standby Equity Commitment, the Company has an operating line with HSBC Canada for \$1.5 million. As of September 30, 2015, the outstanding Company's operating line was \$1,460,855. Interest on the operating line is HSBC prime rate plus 3% effective December 1, 2012. Subsequent to year end the balance on the line of credit was paid off with the proceeds of the September 29, 2015 financing and the line of credit was canceled.

Subsequent to year end, the Company raised total gross proceeds of \$747,000 through a private placement of 747 Limited Partnership Units. The Company will need to continue to raise capital, issue debt and generate positive cash flows from operations to finance its growth and product development. See the Going Concern section in the Risks and Uncertainties for further discussion.

Financial liabilities	< 1 Year	1-3 Years	Thereafter	Total
Accounts payable and accrued liabilities	3,364,843	-	-	3,364,843
Bank loan	1,460,855	-	-	1,460,855
Energy Northwest obligation	177,243	-	-	177,243
Government grant obligation	64,363	-	-	64,363
Debentures	773,588	1,147,398	-	1,920,986
Other Liabilities	171,632	122,553	520,404	814,590
Total	6,012,524	1,269,951	520,404	7,802,880

## Off Balance Sheet Items

The Company has no off-balance sheet financial commitments other than the commitments for operating leases for premises, a purchase order with its former supplier in Europe and consulting, service agreements.

#### Related Party Transactions

The Company had the following related party transactions:

Included in general and administrative expense is salaries and benefits for key management personnel and directors of \$405,487 for the year ended September 30, 2015 (2014 - \$378,887) and share based compensation of \$nil for the year ended September 30, 2015 (2014 - \$30,319). Included in operations expense are salaries, consulting fees and benefits for key management personnel and directors of \$179,250 for the year ended September 30, 2015 (2014 - \$198,000).

Financing costs of \$30,706 for the year ended September 30, 2015 (2014 - \$74,091) related to the debentures and preferred shares series 15 held by key personnel and directors are included in the statement of loss. Interest expenses incurred amounted to \$11,403 (2014 - \$15,848) for the year ended September 30, 2015.

Included in accounts payable and accrued liabilities is \$235,998 (2014 - \$122,476) due to directors and members of key management personnel.

In December 2014, a subsidiary of the Company purchased a \$46,000 debenture with a remaining balance owing of \$42,167 debenture issued in 2012 and \$240,000 of debentures issued in 2013 from key personnel and directors of the Company.

In December 2014, the key management and directors converted their Series 15 preferred shares to common shares.

In December 2014, key management personnel and directors subscribed for 1,100,000 common share units at \$0.30 per unit.

In August 2015, the Company agreed to a termination settlement with its former CEO who remains a director of the Company (Note 14).

In September 2015, key management personnel and directors subscribed for 2,826,190 common share units at \$0.0525 per unit.

Revenue and expense transactions are in the normal course of operations and were based on the exchange value of the service provided, which approximates those amounts of consideration with third parties.

#### Disclosure of Outstanding Share Data

As at January 28, 2015, 151,005,323 common shares were outstanding. In addition, common share purchase warrants, representing the right to acquire 22,260,706 common shares at an average exercise price of \$0.31 per share (See Note 18 of the consolidated financial statements for additional information). The Company had employee stock options outstanding entitling the holders thereof to acquire up to 3,736,339 common shares

of which options to acquire common shares up to 1,786,730 had vested. The weighted average exercise price of the vested options is \$0.33 per share.

The conversion ratio for First Preferred Shares includes a fixed conversion on the initial redemption price and a variable conversion of unpaid dividends accrued to the date of conversion. The unpaid dividend conversion price is based on the closing price of the common shares on the day prior to the conversion. In order to determine the number of shares that are convertible to common shares for unpaid dividends, the Company uses the closing share price on the day prior. In December 2014, the Company issued 28,764,481 common shares on the conversion of all remaining outstanding series of preferred shares, except one (1) Series 8 First Preferred Share, on the date of conversion. The one Series 8 First Preferred Shares is owned by DHTV and is tied to the Investor Rights Agreement between the Company and DHTV.

The conversion included accreted dividends of \$4,456,275 that were also converted into common shares.

The Company expects to convert 747 Limited Partnership Units into 6,790,977 common shares prior to March 31, 2016.

# Financing Costs

Substantial portions of the financing costs recognized in the year are non-cash, in that the cost is accrued, but is not paid. The largest component represents accretion of the debentures. In prior years, the largest portion of non-cash financing costs was the 8% dividends on First Preferred Shares which are "accreted" and added to the redemption value of the Preferred Shares.

Accretion incurred prior to the conversion of the Preferred Shares into common shares was \$nil for the year ended September 30, 2015 compared to \$1,525,161 for the same period in 2014. The financing cost related to the change in fair value of common shares to be issued on conversion in respect of accreted dividends was \$211,760 for the year ended September 30, 2015 as compared to \$662,873 for the same period in 2014.

Interest accreted for the participating debentures issued in 2012, 2013 and 2014 was \$423,821 for the year ended September 30, 2015 (\$465,626 at September 30, 2014). The interest paid, including the percentage paid based upon revenue, was \$238,172 (September 30, 2014 - \$156,769). The increase in interest paid was driven by higher revenues in 2015 as compared to 2014 and was partially offset by principal repayments of \$503,333 (2014 - \$66,667).

The royalty feature of the debentures is adjusted on a quarterly basis to reflect the Company's current forecast and the result that it has on the amounts payable under these agreements. A conservative forecast resulted in the call feature associated with the debentures being valued at zero, the expectation is that the debentures would be held to maturity and the call feature will not be utilized. The change in assumptions caused a loss in the fair value of the embedded derivate of \$94,655 (2014 - \$234,310).

# Foreign Exchange

Our contract manufacturing is priced in U.S. dollars and in Euros, as is the custom in the electronics industry and our sales are priced in Euros and US dollars. The Company is exposed to fluctuations in the Canadian dollar value relative to the U.S. dollar and the Euro when margins from the sales are negative and the Company is required to finance the losses through use of Canadian funds. We do not hedge these exchange risks and have no plans to do so until our volumes are more stable.

#### **Risks and Uncertainties**

#### Going Concern

The consolidated financial statements were prepared on a going concern basis. The going concern basis assumes that the Company will continue its operations for the near future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

At September 30, 2015, the Company had not yet achieved profitable operations since its inception and accumulated a deficit of \$45,403,793 (2014 - \$36,614,985) and recognized a cash flow deficiency from operations in 2015 of \$3,819,059 (2014 - \$4,138,419). Whether and when the Company can attain profitability and positive cash flows from operations is uncertain. The lack of profitable operations and cash flow deficiency may cast significant doubt on the Company's ability to continue as a going concern.

The Company currently has a significant working capital deficit of \$1,954,733 (2014 - \$5,342,364).

The ability to continue as a going concern is dependent on completing equity or debt financings and generating profitable operations in the future in order to meet liabilities as they come due and enable the Company to continue operations. The ability to continue as a going concern may be adversely impacted by the loss of customers and falling sales per customer. To address its financing requirements, the Company will seek financing through the issuance of common shares, first preferred shares, units of ETG Limited Partnership and debentures. The outcome of these matters cannot be predicted at this time. Subsequent to year end, the Company raised additional equity and issued ETG Limited Partnership Units for gross proceeds of \$747,000.

#### **Operating Losses**

We are in the growth phase of our business and are subject to the risks associated with early stage companies, including uncertainty of revenues, markets and profitability, and the need to raise additional funding. As is common with companies at this stage of development it is likely that marketing and operating costs will exceed net sales revenues during the product launch period. Our business and prospects must be considered in light of the risks, expenses and difficulties frequently encountered by companies in the early stage of development, particularly companies in relatively new and evolving markets.

#### Market Acceptance

Market acceptance of our products represents a challenge for the Company. While the competitive advantages to the solar industry and the energy storage sector are material our small size and limited financial resources is a deterrent to customers. We are adjusting our strategy to address this risk through OEM, private labelling and/or licensing relationships that will provide better access to the market and alleviate customer concerns.

We believe that the most significant factors that affect our financial performance and results of operations are as follows:

## Demand for Distributed Solar Generation in Residential Markets

A significant portion of the demand for our products assumes that demand for distributed solar in residential markets will continue. Historically demand for solar power has been incentivized by government pricing policies for solar electricity capital grants and tax credits. We believe that this period is coming to an end and solar must compete on basic economics. In particular US residential markets are highly geared to tax equity financings based on a 30% federal tax credit which is due to reduce to 10% at the end of 2016. We believe, as do many analysts, that solar is competitive in many high-density markets and that solar especially solar in residential markets will continue to grow at rates that are similar to the past 3 years.

This may not occur and if not, demand growth will likely be slower than anticipated for energy storage connected to new systems. There is evidence of this in Germany where new solar installations have slowed as incentive pricing (feed in tariffs) has been removed.

## Differentials in Between Electricity Prices on the Power Grid and the Cost of Solar Electricity

A significant part of our business is tied to the large spread between the cost of solar electricity and the price that must be paid for electricity from the utility. We believe that the number of markets where this situation is operative will continue to grow with a commensurate growth in demand for energy storage to reduce consumer electricity costs. For example, EUPD a German research firm is predicting demand for energy storage will continue to grow despite the slowing or new installations with more than 50% of demand coming for retrofits to existing systems by 2016. As guaranteed feed in tariff contracts begin to expire and homeowners receive only a fraction of the price under current pricing regime, we believe that demand for storage will expand

#### Continuation of Net Metering Policies for US residential markets

Net metering has been a significant incentive in driving growth in US residential solar markets and there is growing pressure to change the pricing structure on net metering in order to dampen demand. While changes to net metering will likely reduce demand for new solar PV, as it has in Germany, the changes will make solar self-consumption a much more attractive alternative in market with high residential electricity prices.

#### Competition and Technological Change

Because we are in a highly competitive market, we may not be able to compete effectively in these markets, and we may lose or fail to gain market share. We face a large number of competitors, many of whom are larger and have greater resources than we have, and we expect to face increasing competition in the future. Our competitors may develop products based on new or proprietary technology that have competitive advantages over our products.

Many of our current and potential competitors have longer operating histories, larger customer bases, greater brand recognition and significantly greater financial, sales, marketing, technical and other resources than we do. Our competitors may enter into strategic or commercial relationships on terms that increase their competitiveness. These competitors may be able to respond more quickly to changing customer demand, and devote greater resource to developing, marketing, and selling their products than we can.

Our business model is also highly dependent on market acceptance of the value propositions for our technology. Even if we are successful in gaining market acceptance for our value propositions, there is always the possibility that one of more of our competitors will develop new technology that enables the same value propositions at the same or better cost than we are able to achieve and our business would be adversely affected. It is also possible that one or more of our competitors will attempt to copy our approach and challenge the validity of our patents. While we believe that our patents and other intellectual property are defensible, there is no assurance that a court will not find to the contrary, negatively affecting the value of Eguana.

## Manufacturing Cost Targets

Our business model assumes that we will be able to use our low manufactured cost and our strategy of selling proprietary electronics sub-assemblies and AC Batteries to penetrate target markets. Delays in reaching adequate rates and efficiencies in production could impair the profitability of our products. Our ability to produce products that are cost effective depends on reaching efficient production levels. In addition, our production process results in the wasting of materials and supplies, which must be minimized to produce cost effective products.

The failure to reach adequate production levels and efficiencies would impair our ability to profitably market our products and would have a material adverse effect on our business, results of operation and financial condition. We cannot control the cost of our raw materials. Our principal raw materials are copper and steel. The prices for these raw materials are subject to market forces largely beyond our control and have varied significantly and may vary significantly in the future. We may not be able to adjust our product prices, especially in the short-term, to recover the costs of increases in these raw materials. Our future profitability may be adversely affected to the extent we are unable to pass on higher raw material or reduce our costs to compensate for such changes.

# Operation and Supplier Risk

At our stage of development, there is a greater than normal exposure to the risk that critical components will not be available on a timely basis, negatively affecting our ability to meet delivery commitment on sales contracts. In addition, with new products there is also a greater risk of failures in quality control, a risk that is increased by the limited resources of the Company. There is also a risk that long lead times for critical components may affect production lead times. Where possible, we address these risks by ensuring multiple sources and working closely with our suppliers through the demand planning cycle and actively monitor critical component suppliers and in some cases invest to secure longer lead-time items.

# Dependence on Customers

Our strategy depends heavily on the ability of our customers to develop markets for their products into which our products are integrated. This risk is exacerbated by our strategy of focusing on applications where our technology makes a material difference to the outcome. This tends to limit the number of customers and in some cases bias the customer selection to new companies with emerging technologies or products, which need our technology. We balance this risk by partnering closely on the demand planning, limiting our supply chain investment and securing financial commitments from our customers in the form of deposits and or letters of credit

# Foreign Exchange

Most of our product sales are and will for the foreseeable future be made in Euros or in US dollars; whereas most of our production costs are incurred in US dollars. To date we have not hedged these transactions except in the form of cash deposits on sales and for the cost of production, and we have no immediate plans to do so. As a result, there is a risk that margins will be reduced due to adverse changes in these currencies relative to the Canadian dollar.

While the risks of these actions are mitigated by our contract manufacturing strategy which enables us to easily change where we manufacture products there can be no assurance that the various government licenses and approvals or amendments thereto that from time to time may be sought will be granted at all or with conditions satisfactory to the Company or, if granted, will not be cancelled or will be renewed upon expiry or that income tax laws and government incentive programs relating to the Company's business, and the solar energy industry generally, will not be changed in a manner which may adversely affect the Company.

## Attracting and Retaining Key Personnel

Our future prospects depend to a significant extent on the continued service of our key executives. Furthermore, the Company's continued growth and future success depends on its ability to identify, recruit and retain key management and engineering personnel. The competition for such employees is substantial and there can be no assurance that the Company will be successful in identifying, recruiting or retaining such personnel. If any of these events occur, it may have a material adverse effect on the business, financial condition and results of operations of the Company or the value of the Common Shares.