



**ORBITE TECHNOLOGIES INC.**

***(Formerly known as Orbite Aluminae Inc.)***

**MANAGEMENT'S DISCUSSION AND ANALYSIS** - For the quarter and year ended December 31, 2015

This Management's Discussion and Analysis ("MD&A") is current to March 30, 2016 and is management's assessment of the operations and the financial results together with the future prospects of Orbite Technologies Inc. ("Orbite" or the "Company"). This MD&A is intended to supplement and complement the Company's annual financial statements and accompanying notes for the quarter and year ended December 31, 2015. The Company's annual financial statements were approved and authorized for issuance by Orbite's Audit Committee and Board of Directors, and have been prepared in accordance with accounting policies consistent with the International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

This discussion contains forward-looking statements that are not historical in nature and involves risks and uncertainties. Forward-looking statements are not guarantees as to Orbite's future results as there are inherent difficulties in predicting future results. These forward-looking statements include, but are not limited to, statements regarding expectations of the Company as to the market price of alumina and other metals, strategic plans, future commercial production, production targets, timetables, mining operating expenses, capital expenditures, and mineral reserve and resource estimates. Forward-looking statements involve known and unknown risks and uncertainties and accordingly, actual results and future events could differ materially from those anticipated in such statements. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include, but are not limited to, fluctuations in the market price of metals, mining industry risks, uncertainty as to calculation of mineral reserves and resources, risks related to hedging strategies, risks of delays in construction, operating cost risks, requirements of additional financing, increases in tax or royalty rates or adoption of new interpretations related thereto, and other risks described in this MD&A under "Risks and Uncertainties" and in the Company's other documents filed from time to time with Canadian securities regulatory authorities. Although the Company is of the opinion that these forward-looking statements are based on reasonable assumptions, those assumptions may prove to be incorrect. Accordingly, readers should not place undue reliance on forward-looking statements. The Company disclaims any obligation to update or revise these forward-looking statements, except as required by applicable law.

The use of "we", "us", "our", the "Company" or "Orbite", means Orbite Technologies Inc. The Company's continuous disclosure materials, including annual and quarterly MD&As, annual and quarterly financial statements, annual reports, AIFs, management proxy circulars, and various press releases issued by the Company are available on or through its website, or at [www.sedar.com](http://www.sedar.com). All figures are in Canadian dollars unless stated otherwise. Any references to tonnes are to metric tonnes. Additional information relevant to the Company's activities can be found on its website at [www.orbitetech.com](http://www.orbitetech.com).

*Scientific and Technical Information*

Unless otherwise indicated, scientific or technical information in this document relating to mineral reserves or mineral resources is based on information prepared by employees or consultants of Orbite, in each case under the supervision of, or having been reviewed and approved by Marc Filion, Eng., Ph.D., MBA. As of the date of this MD&A, Mr. Filion owns 100,000 options to purchase Class A shares of the Company.

Mr. Filion is a "Qualified Person" ("QP") as defined in National Instrument 43-101 – *Standards of Disclosure of Mineral Projects* ("NI 43-101"). A "Qualified Person" could be summarized as an individual who is an engineer

or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project, and is a member in good standing of a professional association.

## CORPORATE STRUCTURE

Orbite Technologies Inc. (the “**Company**” or “**Orbite**”) was incorporated on June 17, 1983 under the *Canada Business Corporations Act*. On June 12, 2015, the Company amended its articles to change its name to “Orbite Technologies Inc.” (formerly known as *Orbite Aluminae Inc.*). Its share capital is comprised of one Class of common shares, i.e. the Class A shares (the “**Common Shares**” or the “**Class A Shares**”), which are the only shares that are currently issued and outstanding. On June 17, 2015, the Company’s securities began trading under the “Industrial-Technology” listing category of the Toronto Stock Exchange instead of the “Mining” category. On October 5, 2015, the Company dissolved 8238375 CANADA INC., its wholly owned subsidiary, as the legal entity had no assets and was never utilized since its incorporation in 2012.

The Company’s head and registered office is located at 6505 Trans-Canada Highway, Suite 610, in Montréal, Québec, H4T 1S3. The Company also has a place of business in the industrial park of Cap-Chat, at 80 Louis Landry Street, Cap-Chat, Québec, G0J 1E0 where it owns a 5,900 m<sup>2</sup> high-purity alumina plant (the “HPA Plant”). The Company also operates a Technology Development Center (the “TDC”) located in the City of Laval, Québec, at 500 Cartier Blvd West.

## GENERAL DESCRIPTION

Orbite Technologies Inc. is a Canadian clean technology based mineral-processing and resource development company. The Common Shares of the Company are traded on the Toronto Stock Exchange under the symbol “ORT” and on the OTCQX International over-the-counter exchange under the symbol “EORBF”. The Company also issued debentures convertible into Common Shares which are listed on the Toronto Stock Exchange under the symbols ORT.DB.B and ORT.DB.C.

The Company has developed proprietary processes and technologies, which are expected to enable the environmentally sustainable and cost-effective production of products such as high-purity alumina (“HPA”), silica, hematite, magnesium oxide, titanium oxide, smelter-grade alumina (“SGA”), as well as rare earth (“REO”) and rare metal (“RMO”) oxides, from a variety of potential feedstocks that could include red mud, fly-ash, aluminous clays, mine tailings, bauxite, and kaolin clay, as well as serpentine residues from Chrysotile processing sites, all without generating red mud waste or tailing.

The Company believes its proprietary technology has certain significant advantages over existing technologies in terms of sustainability and cost-effectiveness. For detailed information on Orbite’s technology, we refer the reader to our comprehensive disclosure provided in our Annual Information Form for the year ended December 31, 2015.

The Company’s proprietary processes and technologies differ from the rest of the industry’s and are either internationally patented or patent pending. During 2015, 13 additional patents were granted. In fact, during that period of time, the Company was successful in obtaining important patent protection regarding processes for recovering rare earth elements (Australia and Canada) as well as processes for preparing SGA (Australia). Patents for separating aluminum from iron and for preparing hematite were obtained in USA, Canada and Australia during the same period. Finally, and more importantly, the Company obtained US and Canadian patents related to waste monetization of (i) red mud and (ii) fly ashes. The Company now owns 100% of the intellectual property rights to 32 patents and 101 pending patent applications in 11 different countries through the international Patent Cooperation Treaty (PCT) process administered by the World Intellectual Property Organization (WIPO). The first intellectual property family is patented in Australia, Canada, China, Japan,

Russia and in the United States. In 2015, the Company filed 20 national entry phases in various countries as well as 3 International patent applications, 5 divisional applications in Australia, Canada and China and 3 continuation applications in the USA.

## RECENT DEVELOPMENTS

The following is a description of the general developments of the Company for the year ended December 31, 2015.

- On January 8, 2015, Orbite announced that the Canadian Intellectual Property Office ("CIPO") issued a notice of allowance for patent application No. 2 857 574, pertaining to *Processes for Treating Red Mud*.
- On January 14, 2015, Orbite announced it had received, from Investissement Québec, a \$3.025 million bridge loan, collateralized against the Company's investment tax credits receivable for the year 2014, estimated at \$4.0 million. The loan, repayable by June 30, 2016, carries an interest rate of 3.5% over the prevailing prime lending rate.
- On January 15, 2015, Orbite filed a preliminary short form base shelf prospectus (the "Prospectus") with the securities regulatory authorities in each of the provinces of Canada and filed its final short form base shelf prospectus on March 20, 2015. The Prospectus provides flexibility over the normal course of business to fund the Company's Cap-Chat facility for the production of High Purity Alumina and the demonstration of the Company's proprietary waste monetization technology.
- On January 30, 2015, the Company announced it had exercised the Series Y rights certificate, as amended, requiring the holder to purchase the corresponding number of units subject to applicable conditions and provisions. These Series Y subscription rights were subsequently terminated, on April 13, 2015, by mutual consent of the holder and the Company, and are no longer in effect.
- On February 16, 2015, the Company announced it was selected to receive up to \$4.5 million in non-dilutive funding from Sustainable Development Technology Canada to be applied towards Orbite's technology development, demonstration and commercialization related to the processing of red mud.
- On February 25, 2015, Orbite confirmed that the Europe-sourced components of the new castable material for the refractory system at the Company's HPA Plant in Cap-Chat had arrived in the port of Montreal.
- On March 3, 2015, Orbite filed a management proxy circular soliciting proxies for the vote relating to the Series Y Subscription rights to be held during a special meeting of shareholders on April 2, 2015. On March 26, 2015, the Company announced the postponement of the shareholders meeting to April 27, 2015, which was cancelled subsequent to the termination of the Series Y Subscription Rights on April 13, 2015.
- On March 12, 2015, Orbite announced it had appointed RHI Canada Inc. as its contractor for the installation of the refractory system for the decomposer and calcination units at its HPA production facility in Cap-Chat, Québec.
- On March 13, 2015, the Company announced that the United States Patent and Trademark Office ("USPTO") had issued a notice of allowance for patent application No. 14/371,364, pertaining to *Processes for Treating Red Mud*.
- On March 23, 2015, the Company announced that it proposed to offer for sale a minimum of 8,500 units of the Company (each, a "Unit") and a maximum of 15,500 Units at a price of \$1,000 per Unit for minimum gross proceeds of \$8.5 million and maximum gross proceeds of \$15.5 million (the "Offering"). On March 26, 2015, the Company announced that because of unusual market activity and conditions

subsequent to the original announcement, it would not be proceeding with the Offering.

- On March 30, 2015, the Company received a payment of \$4.0 million from tax authorities in consideration of investment tax credits on the equipment purchased for manufacturing and processing in the Gaspé region. The payment related to the 2012 financial year and the Company expected subsequent payments to follow. A total of \$20.3 million was received in connection with the refundable investment tax credits resulting from the purchase of manufacturing equipment for the Company's HPA facility and was deposited in a segregated account and served as security for the convertible debentures issued in December 2012 and maturing in December 2017. These debentures have since been fully redeemed by the Company.
- On March 30, 2015, the Company entered into an underwriting agreement with Euro Pacific Canada Inc. (the "Underwriter"), under which the Underwriter agreed to buy on a firm underwriting (bought deal) basis by way of prospectus supplement, 8,500 units of the Company (each, a "Unit") at a price of \$1,000 per Unit for gross proceeds of \$8.5 million (the "Offering"). In addition, the Company also granted the Underwriter an upsizing option to purchase up to an additional of 6,500 Units for additional gross proceeds of up to \$6.5 million (resulting in aggregate of gross proceeds of up to \$15.0 million).
- On April 6, 2015, the Company announced it had completed the first portion of the public offering of units in the amount of \$10.0 million under its short form base shelf prospectus and prospectus supplement dated March 18 and March 30, 2015 respectively. Euro Pacific Canada Inc., the underwriter under the offering, retained an option to purchase an additional \$5.0 million of units until May 6, 2015.
- On April 7, 2015, the Company announced it had shipped high purity alumina ("HPA") samples to five prospective customers, thereby entering their supplier qualification programs. The samples were produced by calcining aluminum chloride hexahydrate ("ACH"), the precursor material for HPA, which was successfully produced at the Company's HPA facility in Cap-Chat in a production run during the third quarter of 2014.
- On April 13, 2015, the Company announced it and Crede Capital, the holder of the Series Y Subscription Rights, had mutually agreed to terminate the Series Y Subscription Rights. Accordingly, the special meeting of shareholders initially scheduled to take place on April 2, 2015 and subsequently postponed to April 27, 2015, was canceled as approval of the Series Y Subscription Rights was no longer required.
- On May 5, 2015 Orbite received from the Government of Québec, an additional \$2.0 million installment towards its 2012 and 2013 Québec Investment Tax Credits, related to equipment purchased for manufacturing and processing in the Gaspé region during the 2012 and 2013 financial years. The Company had at such date received an aggregate of \$22.4 million of the \$25.7 million of tax credits due to the Company related to the 2012 and 2013 financial years. These funds were deposited in a segregated account and served as security for the convertible debentures issued in 2012. These debentures have since been fully redeemed by the Company.
- On May 5, 2015, Orbite also announced it had received patents in both Canada and the United States pertaining to its Red Mud Monetization technology namely Canadian patent 2,857,574 and U.S. patent 9,023,301, both titled *Processes for Treating Red Mud*.
- On May 6, 2015, Orbite completed the issuance of 5,000 additional units for gross proceeds of \$5.0 million as a result of the exercise by Euro Pacific Canada Inc., the underwriter under the public offering, of its financing option, bringing the aggregate gross proceeds for such public offering to \$15.0 million. The additional units had the same terms and conditions as those issued in the first portion of the public offering announced on April 6, 2015.
- On May 26, 2015, Orbite announced it was eligible to receive refundable investment tax credits (ITCs) on its investments in the Gaspé region incurred during 2015, 2016 and 2017. ITCs receivable were limited to

a maximum of \$30.0 million, which Orbite had reached for the years 2012 through 2014. However, this ceiling applies to three-year intervals and a new three-year interval began on January 1, 2015. According to Québec tax regulations, companies making investments in manufacturing and processing equipment in the Gaspé region were now eligible for a 32% return in the form of refundable ITCs. The Company received confirmation from its tax advisors that it is eligible to receive up to \$7.5 million in tax credit refunds for fiscal 2015.

- On June 4, 2015, Orbite announced the passing of Mr. Peter Crossgrove, a director of the Company.
- On June 12, 2015, Orbite provided an update on its financing initiatives and on the construction of its HPA production facility (see section "*Business Development - Q2 2015 Operating and Construction Overview*"), including the commencement of commercial production in Q4 of 2015, instead of Q3 as originally projected. Orbite confirmed, amongst other things, that Investissement Québec ("IQ") agreed to provide Orbite with a \$5.0 million bridge loan, collateralized against the Company's investment tax credits receivable for the year 2015. In addition, the Company announced that it would be receiving from the Government of Québec, a \$3.0 million installment towards its 2012 and 2013 Québec Investment Tax Credits, related to equipment purchased for manufacturing and processing in the Gaspé region during the 2012 and 2013 financial years. The Company had received or expected to receive shortly the totality of the \$25.7 million of tax credits due to the Company related to the 2012 and 2013 financial years. \$25.0 million of these funds were deposited in a segregated account and serve as security for the convertible debentures issued in 2012.
- On June 15, 2015, Orbite announced that effective June 17, 2015, the Company changed its name to Orbite Technologies Inc. to better reflect Orbite's current vision and growth prospects, while emphasizing the importance of its technologies in its current and future growth plans. Accordingly, Orbite's website is now [www.orbitetech.com](http://www.orbitetech.com). Concurrently with its name change, the Company's shares began trading under the "Industrial/Technology" listing segment on the Toronto Stock Exchange, instead of "Mining".
- On June 18, 2015, the Company held its 2015 annual and special shareholders meeting during which shareholders approved all of the resolutions proposed by management, including the approval of the Company's newly implemented restricted share unit plan and deferred share unit plan.
- On June 29, 2015, Orbite announced that it received notification from IP Australia, the Australian Government agency that administers intellectual property (IP) rights, of the granting and the delivery of patent 2012,308,068 pertaining to *Processes for preparing alumina and various other products*. The new patent provides protection until September 16, 2032.
- On July 2, 2015, Orbite announced that the National Research Council of Canada (NRC) would evaluate Orbite's High Purity Alumina (HPA) for use in lithium-ion battery separators in collaboration with Orbite's Technology Development Center.
- On July 10, 2015, the Company received \$2.7 million from the Government of Québec in consideration of investment tax credits on the equipment purchased for manufacturing and processing in the Gaspé region. The payment related to the 2012 and 2013 financial years. At the date of publication of the interim financial statements a total amount of \$25.1 million had been received (including interest) and was deposited in a segregated account to serve as security for the convertible debentures issued in December 2012, which have been fully redeemed by the Company.
- On July 23, 2015, Orbite announced the passing of Mr. Christian Van Houtte, a director of the Company.
- On September 10, 2015, announced it shipped new samples of high purity alumina ("HPA") to prospective customers. The Company had previously shipped 4N8 HPA samples to prospective customers on April 7, 2015. Feedback on purity and chemical composition of samples was positive and these prospective

customers indicated their desire to test HPA that is more representative of full-scale, commercial production, notably relative to mechanical properties.

- On September 17, 2015, the Company updated the market on the construction status of its HPA production facility, including the completion of the installation of refractory materials (bricks, mortar, and castable) in the calciner and decomposer (see section "*Business Development – Q3 2015 Operating and Construction Overview*").
- On September 28, 2015, the Company announced that it was advised by the Canadian Intellectual Property Office ("CIPO") that its patent application No. 2,862,307 titled "*Processes for Treating Fly Ash*" had been found allowable. The patent covers the selective extraction and recovery of valuable elements from fly ash, the residue from coal combustion, using Orbite's chloride-based technology.
- On October 6, 2015, the Company announced that it was advised by the United States Patent and Trademark Office ("USPTO") that its patent application No. 14/388,285 titled "*Processes for Treating Fly Ash*" had been found allowable. The patent covers the selective extraction and recovery of valuable elements such as scandium, gallium, rare earths and rare metals, alumina, magnesium oxide and titanium dioxide from fly ash, a residue from coal combustion, using Orbite's chloride-based technology. The company was also notified that patent application No. 2,885,255 titled "*Processes for Preparing Alumina and Magnesium Chloride by HCl Leaching of Various Materials*" had been found allowable by the Canadian Intellectual Property Office ("CIPO"). This patent covers the selective extraction of magnesium oxide and alumina from leaching an aluminum-containing material with hydrochloric acid. Furthermore, patent application No. 2,834,151 titled "*Processes for recovering rare earth elements from various ores*" had also been found allowable by CIPO.
- On October 6, 2015, the Company entered into a revised loan agreement with the government of Québec regarding its \$2 million non-interest bearing loan contracted on March 24, 2010, whereby the first principal payment date was deferred to January 2020 and the last principal payment date to January 2024.
- On October 15, 2015, Orbite announced it had shipped additional 5N+ high purity alumina ("HPA") samples to seven prospective customers. Six of the prospective customers who received the new 5N+ samples had not previously received Orbite's HPA.
- On October 16, 2015, the Company redeemed all outstanding 2012 debentures in the aggregate principal amount of \$25.0 million plus accrued interests. As per the terms of the Trust Indenture, for each \$1,000 principal amount of debentures redeemed, the Company issued 285.714 class A share purchase warrants exercisable until December 13, 2017 at a price of \$3.50. Accordingly, all of the security granted by the Company to secure the 2012 debentures was released and discharged.
- On October 20, 2015, the Company entered into amendments to its contribution agreements with Canada Economic Development for the \$800,000 and the \$4.0 million of non-interest bearing secured loans contracted on September 4, 2009 and February 5, 2014, respectively. The amendments provided that the \$4.0 million loan payable in 10 semi-annual installments which were to begin in April 2017, were deferred to January 2020. The loans were initially secured by a first ranking movable hypothec against the Company's equipment located at the Company's high purity alumina production facility in Cap-Chat, Quebec, which was replaced by a second ranking hypothec against the (i) Company's equipment located at its HPA production facility in Cap-Chat, Quebec and its Development Technology Center in Laval, and (ii) the immovable comprised of the Company's HPA production facility in Cap-Chat, Quebec.
- On November 5, 2015, the Company completed a secured debt financing totalling up to C\$22.0 million (or US\$16.95 million) in the aggregate (the "Facility"). The Facility is comprised of a US\$6.5 million (C\$8.5 million) revolving credit facility, term loan A (US\$0.45 million, or C\$0.6 million) and term loan B (US\$10.0 million, or C\$13.0 million). The credit facility and term loans bear interest at the London Interbank Offered Rate (or Libor) rate, which shall be no less than 0.5% plus 6.5%.

A portion of the revolving credit facility and term loan A will be repayable as the Investment Tax Credits ("ITC") payments for the 2014 financial year are received by the Company, while the term loan B principal is repayable in 36 equal monthly installments starting December 1, 2016. The balance of the revolving credit facility will be used to finance the Company's eligible receivables. The Facility is subject to certain reporting, financial and other customary conditions. The Facility is secured by a 1st ranking hypothec on the universality of the Company's present and future movable and immovable assets, excluding the ITC receivables for the 2015 financial year, which are currently being financed by Investissement Québec ("IQ"). The Facility shall expire no later than November 4, 2019.

- The Company also announced on November 5, 2015 that Investissement Québec ("IQ") had agreed to increase the amount of its second secured bridge loan, initially granted in June 2015 in the amount of C\$5 million, to C\$7.6 million. This loan is collateralized against the Company's ITC receivables for the 2015 and subsequent financial years, and is repayable upon receipt by the Company of ITC payments for the 2015 financial year from tax authorities, but in no event later than June 30, 2017. Other terms for the loan with IQ remain unchanged, with interest payable at prime plus 3.5%.

The Company also used a portion of proceeds of its November 5 financing, namely \$3.025 million to repay in full the bridge loan contracted with IQ to finance the Company's 2014 ITCs. The security granted to IQ on the Company's 2014 ITC was subsequently discharged.

- On November 10, 2015, the Company announced that the United States Patent and Trademark Office granted the Company U.S. patent No. 9,181,603 titled "Processes for Treating Fly Ash". The patent covers the selective extraction and recovery of valuable elements such as scandium, gallium, rare earths and rare metals, alumina, magnesium oxide and titanium dioxide from fly ash, a residue from coal combustion, using Orbite's chloride-based technology.
- On December 1, 2015, the Company announced it received notification from IP Australia, the Australian Government agency that administers intellectual property (IP) rights, that its patent application No. 2013202318 titled "Processes for Treating Red Mud" was found allowable.
- On December 15, 2015, Orbite announced that a dispute, now resolved, with one of its contractors pushed the end of construction of its HPA Plant and start of commercial production into the first quarter of 2016. An Orbite contractor, in breach of the contract between the parties, withheld from release to Orbite certain parts and equipment in its possession, which were critical to the completion of the calcination system assembly. However, a settlement was reached and the equipment was released on December 14, 2015 (see section "*Business Development – Q4 2015 Operating and Construction Overview – HPA Plant*")

The following is a description of the general developments of the Company subsequent to the financial quarter ended December 31, 2015:

- On January 6, 2016, Orbite announces it shipped additional high purity alumina ("HPA") samples to prospective customers. Of the samples shipped, one was gamma crystalline-phase HPA, production of which could enable Orbite to target a broader, higher-volume customer base. Following positive feedback from test results on previously shipped samples, one of the prospective customers requested an additional and larger sample for the production of end-products using Orbite's HPA for qualification further down the supply chain.
- On January 12 of 2016, Orbite also announced it conducted preliminary research indicating that gold recovery from fly ash using its waste monetization technology is potentially feasible and that it filed a provisional patent application titled "Processes for Recovering Noble Metals from Various Materials".
- On January 14, 2016, the Company announced that it was advised by the Federal Service for Intellectual Property (ROSPATENT) that its Russian patent application No. 2014131946 pertaining to its red mud

monetization technology and titled "Processes for Treating Red Mud", had been deemed allowable. Patent No. 2,862,307 titled "Processes for Treating Fly Ash" was also granted by the Canadian Intellectual Property Office ("CIPO"). Additionally, the United States Patent and Trademark Office ("USPTO") advised the Company that its patent application No. 14/413,940 titled "Processes for Preparing Titanium Oxide and Various Other Products" was found allowable. Furthermore, Australian patent No. 2012231686 titled "Processes for Recovering Rare Earth Elements from Aluminum-bearing Materials" was issued by IP Australia.

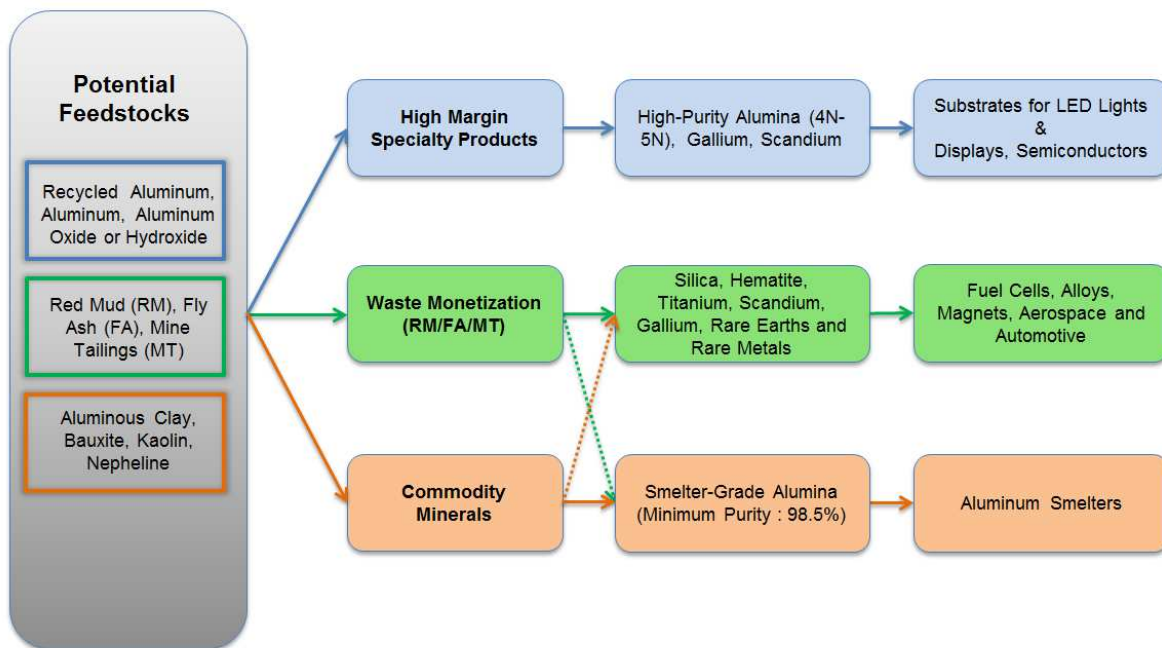
- On February 3, 2016, the Company completed the first portion of a public offering of units in the amount of \$8,482,000 under the short form base shelf prospectus and prospectus supplement dated March 18, 2015 and January 28, 2016 respectively. The gross proceeds were comprised of \$4,000,000 raised on a bought deal basis (the "Bought Deal"), \$1,544,000 raised pursuant to the partial exercise by Euro Pacific Canada Inc., the sole underwriter of the offering (the "Underwriter"), of its Underwriter's option (the "Underwriter's Option") together with \$2,938,000 in outstanding supplier invoices which have been converted into 2,938 units. The Underwriter purchased an additional \$1,060,000 pursuant to a second exercise of its option on February 23, 2016. On March 4, 2016, the Company amended the terms of the Underwriter's Option whereby the number of additional units that the Underwriter may purchase was increased by 1,762 units to a total of 7,762 units. The Underwriter's Option was also extended to April 15, 2016.
- On February 29, 2016, the Company filed a Notice of intent to force the conversion of all outstanding 5% unsecured convertible debentures due April 6, 2020, of which, approximately \$179,000 of principal remained outstanding at such time. The conversion is expected to occur April 7, 2016.
- On March 7, 2016, the Company provided an update on its progress towards plant completion and commissioning, and confirmed the installation of critical system components, withheld by a supplier in breach of his contract, commencing on January 4th and completed on February 10th, 2016. The installation of the air, steam, and process piping and utilities around the calcination system, delayed by the installation of the withheld equipment, was completed. The Company also confirmed commissioning of the feed system for delivering Aluminum Chloride Hexahydrate crystals (ACH) into the decomposer and completion of the cold start-up of the decomposer and calciner and associated air and steam supply system as well as the testing and cold start-up of the CMI (Cockerill Maintenance & Ingénierie) acid capture system off the decomposer.
- On March 7, 2016, Orbite also announced that two additional sample sets were sent to prospective customers, a 5N purity at the request of a new prospective customer and a 5N+ purity to an existing prospective customer who requested different sample material for an additional application.
- On March 15, 2016, the Company announced that due to the complexity of the piping installed and to be installed at its HPA Plant, and the tight quarters for installation, piping installation advanced at one third of the budgeted and standard installation rate. A comprehensive review of costs incurred to install those systems and those required to complete specialty piping installation, notably in the decomposer and crystallization sectors, indicated that capital costs initially projected must be increased by approximately \$9.9 million, to incorporate the impact of the slower installation pace. This brought the revised total external capital cost budget of the project to \$56.2 million from \$46.3 million. Consequently, and in order to limit construction costs and manage its working capital, the Company ended overtime work and indicated it may postpone certain activities, which will push back the start of commercial production into Q2 of 2016 instead of Q1 as previously contemplated. The Company's current financial resources are insufficient to cover such additional construction costs, and the Company is exploring financing alternatives, such as leveraging its estimated \$5.6 million of 2016 Investment Tax Credits as security for a non-dilutive bridge loan, as it has done in the past.



- On March 21, 2016, the Company announced that due to additional financing requirements to complete its HPA production facility, management temporarily scaled down the number of external contractors on site to reduce working capital requirements. While this slows down certain construction activities, Orbite employees continued commissioning activities as described in the Company's press releases of March 7 and March 15, 2016. Additionally, the Company announced management was reviewing its project execution structure to promptly address deficiencies from its project management and engineering teams. Concurrently, Management was working on a number of financing alternatives with its existing financial partners, including discussions with the Government of Québec and Investissement Québec. Financing alternatives may include leveraging the Company's 2016 Investment Tax Credits, which are estimated at \$5.6 million, as security for non-dilutive debt, along similar lines as the Company has managed in the past.

## BUSINESS DEVELOPMENT

Management is presently transforming Orbite from a technology development company into an operating entity commercializing its technologies. In order to achieve this transition, the Company has focussed its commercialization plan on three priorities: specialty products, waste monetization, and commodity minerals.



### Short Term — Specialty Products

The Company's short term priority, being the production of specialty products, is focused on completion of the Company's three tonnes per day ("tpd") high purity alumina plant (the "HPA Plant"), scheduled to enter commercial production in the second quarter of the 2016 financial year.

High-purity alumina is used primarily to manufacture industrial sapphire substrates used in electronics. These sapphires are widely used in LED lighting applications, in LED displays, and in plasma display panels such as those found in handheld devices, cellular phones, laptops, and televisions. It is also used to manufacture Lithium Ion Batteries (LIB), which are in turn used in multiple applications including portable electronics, electric vehicles and high capacity energy storage.

Orbite is currently in the process of finalizing the construction of its HPA production facility located in Cap-Chat, on the Gaspé Peninsula in the Province of Québec. On March 8, 2012, the Company ceased operations of its alumina pilot plant and commenced the first phase of construction in June 2012, with the intention to convert the facility into a full-scale, 3 tpd, high-purity alumina production plant, designed to produce alumina at 99.99% ("4N") and greater purities. The second phase of construction commenced in August 2014 and commercial operations are expected to begin in Q2 2016. Even though the plant is not currently operational commercially, was operated on an intermittent basis in order to produce samples for customer qualification programs.

#### 2015 Operating and Construction Overview – HPA Plant

The development plan for the HPA Plant is comprised of three phases, as follows:

- **Phase 1** – Construction of the purification section of the HPA Plant to a capacity of three tonnes per day of HPA
- **Phase 2A** – Increase of the HPA Plant capacity to five tonnes per day of HPA
- **Phase 2B** – Conversion of the Alumina Extraction Unit to the Chloride-based Technology

#### **Phase 1** – Construction of HPA Plant to a capacity of three tonnes per day of HPA

Phase 1 of the development plan and the beginning of commercial production is expected to be completed during the second quarter of 2016 and the Company expects to ramp up commercial production to three tonnes per day of HPA production during the subsequent quarter. As at December 31, 2015, the Company had incurred external capital costs of approximately \$38.9 million and the Company estimates that total external capital costs for completion of the construction and commissioning of the HPA Plant will be \$56.2 million in the aggregate.

#### *Q1 Operating and Construction Overview*

Construction of the HPA Plant continued throughout the 2015 financial year. During the first quarter of 2015, the Company continued the installation of major mechanical equipment including the decomposer and calciner and the Company received Europe-sourced components of the new castable material for the refractory system at the Company's HPA Plant in Cap-Chat. The Company accelerated the procurement stage of the construction and optimisation process by securing agreements with several key suppliers, including the appointment of RHI Canada Inc. for the installation of the refractory system for the decomposer and calcination units, and the installation process commenced, as announced, at the end of March of 2015.

#### *Q2 Operating and Construction Overview*

The construction process intensified during the second quarter of 2015, during which the refractory installation and internal prepping of the decomposer and calciner ovens commenced, replacement bricks were successfully precast using the new refractory material and refractory installation in the calciner system auxiliary piping progressed. The Company awarded prefabrication contracts for lined piping, major mechanical equipment installation, electrical and instrumentation installation while civil work and building erection progressed according to schedule. New refractory material was also successfully cast in place and pre-cured in the decomposer and calciner in Cap-Chat. Overall installation of bricks and mortar in the calciner, decomposer and piping progressed, with onsite technical oversight from Outotec and refractory suppliers. However, installation productivity by the contractors was not as high as forecast by them at the contract bidding stage. Lower than anticipated productivity was due to a steeper than anticipated learning curve, and longer intermediate curing requirements than originally projected for the new refractory material. To ensure that precision and quality requirements related to this critical component of the plant were met,

Orbite agreed to an extended timeline. A labor dispute at one of the Company's suppliers also affected its ability to fulfill, within the initially contemplated timeframe, its commitment of supplying a number of components critical to the Company's timeline in relation to the completion of the high temperature steam system for the calciner and decomposer. Those components were delivered during the 3rd quarter of 2015, but did not meet specifications. The Company was nonetheless able to source replacement components in Europe requiring additional modifications to its piping prefabrication schedule and the order in which the various plant systems were completed. Consequently, the Company announced commencement of commissioning in Q3 2015 and the expected start of commercial production in Q4 2015.

### *Q3 Operating and Construction Overview*

During the 3<sup>rd</sup> quarter of 2015, Orbite completed several significant construction milestones, including refractory installation (bricks, mortar and castable), internal prepping of the decomposer and calciner ovens, the curing process of the refractory systems in both the decomposer and the calciner and refractory installation and curing for the calcination system auxiliary equipment.

The Company also advanced prefabrication of lined and specialty alloy piping, the integration of the calcination system into the plant through the installation of the calciner and decomposer internal heating elements, installation of the main process piping and equipment attached to the decomposer and calciner, such as the seal pots, discharge devices together with flue gas piping installation and other major mechanical equipment and vessels related to the digestion system, the crystallization system, the acid recovery system and the acid regeneration system.

The Company also completed the installation of the main inlet transformer, electrical cable trays on all 3 floors, the new electrical room to host the electrical supply system for the calcination system (32 transformers and controllers) and that of the transformers and controllers. The installation of the heat exchanger building, the electrical transformer room and the calciner discharge device building extension was also completed during the quarter together with various internal modifications to the building structure.

Commissioning of certain sections commenced in Q3 as planned, including:

- Steam production system,
- Process waste water treatment plant,
- Plant process and instrumentation air system,
- Caustic and acid storage and delivery systems,
- Plant fuel distribution system,
- Raw water distribution system,
- Cooling water distribution system,
- Recycled process water system,

### *Q4 Operating and Construction Overview*

During the fourth quarter of 2015, the Company revised the expected start of its commercial production from the end of Q4 of 2015 to Q1 of 2016 (now Q2 of 2016). The delay was caused by a dispute, now resolved, with one of its contractors whereby the contractor, in breach of its contractual obligations, withheld from release to Orbite certain parts and equipment in its possession, which were critical to the completion of the calcination system assembly. A settlement was reached and the equipment was released on December 14th.

In spite of this, construction in Cap-Chat progressed well, albeit the installation of certain systems and piping was delayed as it was only possible subsequent to installation of the released equipment. Orbite personnel however continued with commissioning activities, and notably initiated the cold start-up testing of the calciner and related acid capture system during this period. Even while the dispute was ongoing, the Company was able to meet a number of planned construction milestones, including the installation of all major mechanical equipment and vessels related to the feedstock system, digestion system, crystallization system, acid recovery system and acid regeneration system, the installation of the main process piping and equipment attached to the decomposer and calciner and the installation of steam piping.

Electrical and instrumentation wire pulling was also completed together with all connections in the main electrical control room and the communication system for all motors and the fibre optics cabling for all instrumentation. All communications-instrumentation cabinets were installed and tested.

Installation of structural elements and foundations and the ventilation system installation were materially completed during the quarter together with commissioning of the Hydroxide feedstock system, the air system to calcination and the steam system to calcination.

#### *Construction Cost Updates*

On March 15, 2016, the Company announced that due to the complexity of the piping installed and to be installed at its HPA Plant, and the tight quarters for installation, piping installation advanced at one third of the budgeted and standard installation rate. A comprehensive review of costs incurred to install those systems and those required to complete specialty piping installation, notably in the decomposer and crystallization sectors, indicated that capital costs initially projected must be increased by approximately \$9.9 million to incorporate the impact of the slower installation pace. This brought the revised total external capital cost budget of the project to \$56.2 million from \$46.3 million. Key areas of cost variance between the updated and previous estimate were notably due to additional labor for piping installation and additional engineering and project management fees related thereto. Consequently, and in order to limit construction costs and manage its working capital, the Company ended overtime work and indicated it may postpone certain activities, which will push back the start of commercial production into Q2 of 2016 instead of Q1 as previously contemplated.

On March 21, 2016, the Company announced that due to additional financing requirements to complete its HPA production facility, management temporarily scaled down the number of external contractors on site to reduce working capital requirements. While this slows down certain construction activities, Orbite employees continued commissioning activities as described in the Company's press releases of March 7 and March 15, 2016. Additionally, the Company announced management was reviewing its project execution structure to promptly address deficiencies from its project management and engineering teams. Concurrently, Management was working on a number of financing alternatives with its existing financial partners, including discussions with the Government of Québec and Investissement Québec. Financing alternatives may include leveraging the Company's 2016 Investment Tax Credits, which are estimated at \$5.6 million, as security for non-dilutive debt, along similar lines as the Company has managed in the past.

#### **Phase 2A** – Increase of HPA Plant capacity to five tonnes per day of HPA

The detailed engineering and cost estimate for Phase 2A are expected to be completed in 2016. After such work is completed, the Company will be able to more accurately estimate the costs and time involved in the plant's expansion to 5 tonnes per day.

## **Phase 2B – Conversion of the Alumina Extraction Unit to the Chloride-based Technology**

As the Orbite technical team is heavily focused on the HPA Plant start-up, preliminary engineering for the conversion of the HPA Plant's alumina extraction unit to a demonstration facility for multi-feedstock utilization, including aluminous clays, red mud, fly-ash and mine tailings, using the Company's chlorine technology is planned to be completed in early 2017. After such work is completed, the Company will be able to more accurately estimate the costs and time involved in the plant's conversion to the chloride-based technology and whether to prioritize plant expansion or conversion of the extraction unit.

No independent assessment, preliminary economic evaluation, feasibility or pre-feasibility study has been completed in connection with the construction, design and operation of the HPA Plant. The Company recognizes and understands the risks this entails and urges investors to consider the same. There can be no assurance that the HPA Plant will operate successfully or economically, that the estimated capital costs will be sufficient to achieve the design capacity or the product purities and characteristics, or that the plant will provide a return on investment or become profitable.

## **Medium Term — Waste Monetization**

The Company's chloride-based extraction process is the technology platform for the treatment and monetization of industrial wastes, such as Red Mud, Fly Ash and Mine Tailings, the production of smelter grade alumina (SGA), and the production of other by-products, such as hematite, magnesium oxides and rare earth and rare metal products.

Once all phases of construction of the HPA Plant are completed, the Company expects that its Cap-Chat facility will have the flexibility to use a variety of feed stocks, such as commercially available products (smelter-grade alumina, aluminum hydroxide or aluminum from recycled products), aluminous clay from the Company's Grande-Vallée deposit, and red mud residue or fly ash, to produce HPA or SGA (for customer testing) and other by-products, such as hematite, magnesium oxides, silica and rare earth and rare metal oxides. Thus, in addition to becoming a commercial HPA production facility, the Cap-Chat plant will also serve as a commercial scale demonstration facility for Orbite's Red Mud Monetization (RMM), Fly Ash Monetization (FAM), and commodity minerals.

Based upon operating with multiple feedstocks in 2017, Orbite plans to use the operating data and knowledge thus obtained, to design and build its first industrial prototype (estimated to be in the range of 100k – 200k tpy of feedstock consumed) to be installed at a to be selected waste site (red mud, fly ash, or mine tailings ponds). The Company's goal would be to have a first prototype operational in 2018, followed by the commissioning of a full scale waste monetization plant (1M tpy feedstock) in 2020. The Company should then be in a position to begin licensing its technology on a global scale. Such plants would process third-party stockpiles of waste, including red mud and fly ash, producing alumina and other high-value products, returning only a small residue to the stockpile of less than 10% of the original volume.

## **Red Mud**

Red mud is generated as a by-product of alumina production using the industry-standard Bayer process. Red mud contains alumina, silica, iron, rare metals and other valuable elements, but with no viable means to remediate or extract value from this waste. Red mud is typically stockpiled in open-air tailings ponds, although in some cases it has been disposed of in the ocean, and represents a long-term environmental liability for the entire aluminum industry. According to the International Aluminum Institute ("IAI"), there are over 100 existing alumina refineries in the world and approximately 30 closed sites totaling an estimated global stockpile of over 3 billion tonnes of red mud at sites in Europe, Asia, North and South America. Over 120 million additional tonnes are produced annually, with less than 5% being re-utilized.

### *Memorandum of Agreement with Veolia Environmental Services*

On February 4, 2013, Orbite announced it had signed an exclusive worldwide collaborative agreement (the "MOA") with Veolia Environmental Services ("Veolia") for the remediation of red mud. Veolia is a global, integrated operator of waste management services that is active across all segments (solid, liquid, non-hazardous and hazardous waste) and intends to build red mud monetization ("RMM") plants around the world under a technology license from Orbite.

The MOA has not been renewed and has since expired although commercial discussions between the Company and Veolia are ongoing. The Company has since initiated early stage discussions with several other potential partners pertaining to remediation of red mud, fly ash and other treatable waste.

The MOA and ongoing discussions with Veolia do not involve or have any impact on the HPA Plant.

### ***Fly Ash***

According to the International Energy Agency, coal is used to generate 41% of the world's electricity, and is a significant source of thermal heat for industrial processes. Fly ash is one of the waste by-products generated from the burning of coal in coal-fired power plants. The largest producing regions of fly ash waste are China, India, USA, European Union, Africa, the Middle East and Russia.

According to the International Energy Association ("IEA") Clean Coal Centre, there are 7,000 coal-fired power units worldwide, spread over 2,300 sites, of which about 620 are located in China. It is estimated that 40-50% of the coal combustion by-products are re-used primarily in low-value applications, such as additives to concrete production - where such an industry exists nearby - and in embankments or other structural fills, with the remainder being sent to stockpiles. Fly ash contains alumina, silica, iron, rare metals and other valuable elements, but no viable remediation technology has previously existed.

### ***Agreements***

At this time, the Company is pursuing discussions but has not entered into any agreements related to fly ash remediation.

Orbite is constantly reviewing the timelines related to its projects. All material changes, once properly quantified using our best estimates, will be communicated to investors in a timely manner. It is important to remember that our estimates are forward looking statements and are based on information available at the time and/or the Company management's good-faith beliefs with respect to future events and are subject to known or unknown risks, uncertainties, assumptions and other unpredictable factors, many of which are beyond the Company's control. These and other risks are disclosed in the section entitled "*Risks and Uncertainties*" and otherwise referenced in all our public disclosures.

### **Longer Term — Commodity Minerals**

The Company proposes the building and operating of a smelter-grade alumina ("SGA") production plant (the "SGA Plant") processing aluminous clay mined from the Company's Grande-Vallée deposit, which is situated in the Gaspé Peninsula of the Province of Québec. The basic engineering design of the SGA Plant, based on the Company's proprietary processes, has been completed and the plant design follows the parameters of the Preliminary Economic Assessment ("PEA") Technical Report dated May 30, 2012, prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). The SGA Plant is expected to process 2.5 million tonnes of aluminous clay per year resulting in an estimated annual production of 540,000 tonnes of SGA, as well as by-products that include high-purity hematite, high-purity silica, magnesium oxide, and individually separated rare earth and rare metal oxides. The Company intends, subsequent to the completion of the HPA Plant and its conversion to Orbite's chloride technology in 2016, to

undertake, in 2017, a feasibility study for the SGA Plant, including site selection and detailed engineering, subject to securing sufficient project funding and selection of a joint venture partner.

#### *Preliminary Economic Assessment (PEA)*

The PEA estimated that the Grande-Vallée deposit contains an Indicated Mineral Resource of 1.04 billion tonnes of aluminous clay grading 23.37%  $\text{Al}_2\text{O}_3$ , 52.62%  $\text{SiO}_2$ , 8.42%  $\text{Fe}_2\text{O}_3$ , 1.64%  $\text{MgO}$ , and 6.90% as mixed oxides, as well as 563 ppm in REE+RM. The effective date of this mineral resource estimate is November 23, 2011. The PEA estimated that an SGA plant processing 2.5 million tonnes per year of aluminous clay from the Grande-Vallée deposit, could achieve an annual production of 540,000 tonnes of smelter-grade alumina and other by-products, including 189,298 tonnes of hematite, 1.2 million tonnes of silica, and approximately 48 tonnes scandium oxide, 76 tonnes gallium oxide, and 851 tonnes of heavy and light rare earth oxides. The alumina was determined to be the primary product whereas the production of silica, hematite, magnesium, mixed oxides, REE and RM should be considered as by-products. The capital costs were estimated at \$500 million and the annual operating costs at \$113 million. As per NI 43-101, a Preliminary Feasibility Study or a Feasibility Study is required to demonstrate the economic merit of Mineral Resources and their conversion to Mineral Reserves. At the time of this document, no such study has been completed and therefore the Grande-Vallée deposit currently has no Mineral Reserves.

The PEA economic conclusions were originally calculated using August 2011 market prices. Since then, the market prices of alumina, rare earth oxides and rare metal oxides have decreased significantly (in some cases, over 50%), and as such the conclusions of the PEA under Scenario 1 (alumina and hematite) and Scenario 2 (alumina and all by-products) are not representative of the current financial viability of the Company's SGA project. We urge readers to review the "Sensitivity Analysis" sections provided in the Preliminary Economic Assessment, including Tables 22-5 and 22-6, which provided adjusted financial conclusions for Scenario 2 reflecting different assumptions for market prices, including a "Low-Case" which reflected the market prices effective as at November 23, 2011 (see Sedar filing dated May 30, 2012). The following table provides a comparison of the estimated revenues and Net Present Value (NPV) between the Low-Case, High Case scenarios and the market prices in effect on March 8, 2016 for Scenario 2 using a 10% discount rate (pre-tax), in Canadian currency. As revenues, capital and operational expenditures in the PEA disclosure were provided in Canadian currency, and considering most sales and some equipment purchase and construction costs are likely to be in US currency, and in order to reflect more accurate market conditions, the NPV disclosure provided in Canadian currency was updated as to reflect the CAN/US average exchange rate of 1.3905 CA\$/USD which is the average rate of the 90-day period from December 10, 2015 to March 8, 2016 (Source: Bank of Canada website: [www.bankofcanada.ca](http://www.bankofcanada.ca)).

Case	Alumina Price (CA\$/tonne)	Hematite Price (CA\$/tonne)	Silica Price (CA\$/tonne)	Magnesium Oxide Price (CA\$/tonne)	REO/RMO Average Basket Price (CA\$/kg)	Alumina Revenues (Million CA\$)	REO/RMO Revenues (Million CA\$) <sup>(2)</sup>	Total Annual Revenues (Million CA\$)	Annual Gross Margin (Million CA\$)	Capex (Million CA\$)	IRR	Payback (Years)	NPV @ 10% (Million CA\$)
High-Case	\$425	\$200	\$25	\$400	\$479	\$230	\$393	\$702	\$572	\$500	114%	0.9	\$4,782
Low-Case	\$325	\$125	\$10	\$292	\$168	\$176	\$138	\$358	\$237	\$500	48%	2.1	\$1,690
March 8, 2016 <sup>(1)</sup>	\$393	\$72	\$44	\$584	\$162	\$212	\$133	\$430	\$265	\$696	38%	2.6	\$1,752

#### Notes:

(1) Prices (In USD) extracted from the following sources: Alumina: CRU or Platt's alumina index is more representative of metallurgical grade alumina market prices than linking it to aluminum price. Quarterly Platt's Alumina price index (PAX) was US\$282/tonne. Hematite: The conservative price is based on selling the entire production for iron ore production (steel manufacturing) not taking into account any volume sold in the magnets or other special applications that do command much higher prices. The current iron ore price is US\$46.18-62% Fe ([www.indexmundi.com](http://www.indexmundi.com)-last available). Our  $\text{Fe}_2\text{O}_3$  is 99.5% pure and therefore does contain 69.55% of Fe.  $\text{US\$46.18} \times 69.55\% / 62\% = \text{US\$51.80}$  that was used in the NPV calculation. Silica: The recent silica prices show an average of US\$32 per tonne ([www.indmin.com](http://www.indmin.com)) that was used in the NPV calculation. Magnesium and other oxides: Regarding "MgO and other oxides", the MgO prices used was US\$420.00/tonne and US\$5/tonne was used for the "other oxides". Current MgO price is found on ([www.indmin.com](http://www.indmin.com)). An average price of US\$420.00/tonne is showed for the latest transactions on calcined MgO-94% & 96% purity and therefore was used to update the results. Other oxide (Ca, K, Na) price estimate was left at US\$5/tonne. Rare earths and rare metals RE/RM: Current prices were extracted from the "Metal Page" website ([www.metal-pages.com](http://www.metal-pages.com)). Regarding Scandium oxide, the conservative price of US\$1,500/kg was used. The average exchange rate from December 10, 2015 to March 8, 2016 (1.3905 CAD\$/USD) was used to convert prices, annual revenues and estimated CAPEX in CAD\$.

(2) In the PEA base case (High-Case), the following rare earths and rare metals prices per kg were used for the NPV calculations: Ga (as metal)= US\$900, Sc<sub>2</sub>O<sub>3</sub>= US\$3,095, Y<sub>2</sub>O<sub>3</sub>= US\$180, La<sub>2</sub>O<sub>3</sub>= US\$143, CeO<sub>2</sub>= US\$150, Pr<sub>6</sub>O<sub>11</sub>= US\$275, Nd<sub>2</sub>O<sub>3</sub>= US\$400, Sm<sub>2</sub>O<sub>3</sub>= US\$129, Eu<sub>2</sub>O<sub>3</sub>= US\$650, Gd<sub>2</sub>O<sub>3</sub>= US\$203, Tb<sub>2</sub>O<sub>3</sub>= US\$4,332, Dy<sub>2</sub>O<sub>3</sub>= US\$600. For March 8, 2016, the following average prices (USD/kg - FOB China) were extracted from Metal Pages web site (www.metal-pages.com): Ga (as metal)= \$133.63, Y<sub>2</sub>O<sub>3</sub>= \$4.20, La<sub>2</sub>O<sub>3</sub>= \$2.00, CeO<sub>2</sub>= \$1.85, Pr<sub>6</sub>O<sub>11</sub>= \$53.86, Nd<sub>2</sub>O<sub>3</sub>= \$40.17, Sm<sub>2</sub>O<sub>3</sub>= \$1.99, Eu<sub>2</sub>O<sub>3</sub>= \$95.38, Gd<sub>2</sub>O<sub>3</sub>= \$46.50, Tb<sub>2</sub>O<sub>3</sub>= \$380.90, Dy<sub>2</sub>O<sub>3</sub>= \$220.93. A conservative price of \$1,500 per kg was used for the Sc<sub>2</sub>O<sub>3</sub>. The average exchange rate from December 10, 2015 to March 8, 2016 (1.3905 CAD\$/USD) was used to convert REO/RMO Revenues in CAD\$.

### *Offtake Agreement with Glencore International AG*

On June 17, 2013, Orbite concluded a binding offtake agreement with Glencore International AG, a subsidiary of Glencore Xstrata plc, for the purchase of 100% of the smelter-grade alumina from the Company's proposed SGA plant in Québec for an initial term of 10 years from the commencement of commercial production. The Agreement also foresees that Orbite and Glencore will undertake negotiations relating to Glencore's potential financial participation in the ownership and operation of the Company's proposed SGA plant in Québec. The Parties have not set any timetable for the commencement or conclusion of these negotiations. The offtake and ongoing discussions with Glencore do not involve or have any impact on the HPA Plant.

## **MINERAL EXPLORATION PROPERTIES**



### *Québec*

Orbite owns 100% of 74 mineral claims totaling approximately 41 km<sup>2</sup> as well as one mining lease of 98.5 ha at a site near Grande-Vallée, Québec. This is the site of the Grande-Vallée aluminous clay deposit with a 1.04 billion tonnes Indicated Mineral Resource.

As of December 31<sup>st</sup> 2015, Orbite also owned 100% of 90 mineral claims covering approximately 51.2 km<sup>2</sup> at sites near Rimouski and Cap-Chat, Québec. These claims cover a portion of the regional aluminous clay "Original Formation" which hosts the Grande-Vallée deposit. However, as of the date of this MD&A, Orbite now owns 124 mineral claims covering approximately 703.8 km<sup>2</sup> at sites near Rimouski and Cap-Chat, Québec following the reclaiming of certain properties.



During 2015, Orbite started a process of not renewing claims in the Levis to Rimouski area, recognizing that these claims did not show the required potential as an aluminous clay resource.

For more information, see our Annual Information Form dated March 30, 2016 for the year ended December 31, 2015, specifically the section entitled "Description of the Grande-Vallée Mineral Property".

#### *Nova Scotia*

On November 14, 2012, the Company announced it had entered into an agreement with a private company and its shareholders, pursuant to which the Company was granted an exclusive option for a period of three years (the "Option Agreement") to acquire a 100% undivided interest in the mineral claims and exploration rights of the Chaswood kaolin clay and sand property located in Halifax County, Nova Scotia, Canada (the "Chaswood Property").

The Chaswood Property consists of 163 claims encompassing 2,608 hectares (approximately 26.1 km<sup>2</sup>) in central Nova Scotia and is accessible by a network of paved highways and all-weather secondary roads. The property is strategically located near a natural gas pipeline and in proximity to the Port of Halifax, a major commercial port that could enable national and international shipments from a nearby potential SGA plant.

In order to acquire a 100% undivided interest in the Chaswood Property, Orbite made a payment of \$150,000 upon signing of the Option Agreement, and is required to: (1) incur aggregate exploration expenditures on the property of \$1 million by December 31, 2013 including costs related to NI 43-101 technical report, (2) deliver a NI 43-101 technical report by December 31, 2014, and if Orbite decides to exercise its option, (3) issue 2.4 million Class A Shares to the vendor, by January 1, 2016, released in tranches of 10% every nine months following the date of issuance. As of the date hereof, Orbite has not incurred the entirety of the exploration expenditures which were to be incurred in 2013 on the property (see (1) above), has not delivered a NI 43-101 technical report by December 31, 2014 (see (2) above) and has not issued the 2.4 million Class A Shares to the vendor by January 1, 2016 (see (3) above) and therefore, has not fulfilled the conditions required pursuant to the Option Agreement. Discussions with the owner of the claims are ongoing to renegotiate the conditions and timelines.

### **DIVIDEND POLICY**

The Company's policy is to retain earnings, if any, for the financing of future growth and development of its business. As a result, the Company has not paid dividends in the past three (3) years and does not intend to pay dividends in the foreseeable future.

### **DISCLOSURE OF OUTSTANDING SECURITIES AS OF MARCH 30, 2016**

The Company is authorized to issue an unlimited number of Class A Shares. The holders of Class A Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company. Each Class A Share carries one vote. The holders of Class A Shares have the right to receive dividends if, as and when declared by the Board of Directors of the Company. In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs, the holders of Class A Shares of the Company are entitled to receive the remaining property and assets of the Company on a pro rata basis.

The Company has a common share purchase option plan (the "Option Plan") for its directors, officers, consultants and employees. The maximum number of shares available under the Option Plan is 10% of the outstanding Class A shares at the end of the period. Options granted under the Option Plan have a maximum ten-year term with vesting period at the discretion of the Board of Directors. Prior to October 2011, options

had a five-year term. Options are granted at a minimum exercise price equal to the volume weighted average price of the Class A Shares on the TSX stock exchange for the five trading days prior to the grant of the options.

The Company recently implemented a Restricted Share Unit Plan ("RSU Plan") and a Deferred Share Unit Plan ("DSU Plan") which were approved by shareholders on June 18, 2015. The DSU and RSU Plan provides that restricted and deferred share unit awards may be granted by the Board or the Corporate Governance & Human Resources committee (the "Committee") which administers the RSU Plan to full-time employees, officers and eligible contractors of the Company in a calendar year as compensation for services rendered to the Company. Each restricted and deferred share unit awards entitles the holder, subject to the terms of the DSU or RSU Plan, to receive a payment in fully-paid Common Shares issued from the treasury of the Company or a cash equivalent.

The aggregate number of Shares reserved for issuance upon the redemption of all share unit awards granted under the DSU and RSU Plan, or any other security-based compensation arrangement of the Company (including, without limitation, the Stock Option Plan), shall not exceed 10% of the issued and outstanding Shares.

As of March 30, 2016, the Company had 413,421,554 Class A Shares issued and outstanding. The Company also had 93,248,670 Share Purchase Warrants exercisable at a weighted average price of \$0.67 and expiring between December 2016 and February 2019. The Company also had 19,247,750 Common Share Purchase Options at a weighted average price of \$0.67. The Company could issue a further 550,769 Common Shares if the 2015 Debentures and 4,365,000 Common Shares if the February 2016 remaining Debentures were fully converted at the option of the holders.

Outstanding Class A Shares	413,421,554
Share purchase warrants	93,248,670
Share options	19,247,750
Convertible debentures (2015) <sup>(1)</sup>	550,769
Convertible debentures (February 2016) <sup>(2)</sup>	4,365,000
<b>Fully Diluted</b>	<b>530, 833,743</b>

<sup>(1)</sup> Assuming a conversion price of \$0.325, not including the additional shares to be issued for the make-whole amount.

<sup>(2)</sup> Assuming a conversion price of \$0.40, not including the additional shares to be issued for the make-whole amount.

## SELECTED ANNUAL FINANCIAL INFORMATION

The following table summarizes selected annual financial information of the Company for the most recent financials years:

<b>Selected annual Financial Information</b>			
Years ended December 31 (In thousands of dollars, except for amounts per share)	2015	2014	2013
Statements of Financial Position data			
Cash and Short-Term Investments	2,597	3,354	10,279
Working Capital	4,156	7,827	9,819
Total Assets	142,877	135,475	123,745
Total non-current liabilities	18,907	28,452	36,301
Equity	103,473	101,862	82,274
Statements of Comprehensive Loss data			
Research and development charges (1)	1,904	1,794	1,470
General and administrative charges (1)	6,027	6,682	8,372
HPA plant operations (1)	4,416	3,591	2,783
Write-off for redesign	-	1,783	-
Share-based payment	1,371	1,686	1,188
Comprehensive Loss	15,369	12,399	15,038
Basic and diluted net loss per share	(0.04)	(0.04)	(0.08)
Share Information			
Weighted Average Shares outstanding (In thousands)			
Basic and Diluted	358,097	280,363	191,644

(1) Includes the related share-based payments expense.

## FINANCIAL CONDITION

Statements of Financial Position		
(in thousands of dollars)	December 31, 2015	December 31, 2014
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 1,723	\$ 2,978
Short-term investments	875	376
Restricted cash	4,152	-
Sales taxes and other receivables	1,462	1,346
Current income and mining taxes recoverable	1,761	1,761
Investment tax credits and other governmental assistance receivable	12,837	5,198
Inventory	244	130
Prepaid expenses and others	1,599	845
Derivative financial instruments	-	354
Total current assets	24,653	12,988
Non-current assets:		
Restricted cash	-	16,354
Investment tax credits receivable	-	9,357
Property, plant and equipment	99,410	78,392
Patents and others	1,770	1,409
Exploration and evaluation assets	17,044	16,975
Total non-current assets	118,224	122,487
<b>Total assets</b>	<b>\$ 142,877</b>	<b>\$ 135,475</b>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 8,071	\$ 5,155
Short-term loan	11,768	-
Long-term debt	550	5
Derivative financial instrument	108	-
Total current liabilities	20,497	5,160
Non-current liabilities:		
Convertible debentures liability	113	21,372
Long-term debt	16,422	4,639
Deferred income and mining tax liabilities	2,372	2,372
Derivative financial instrument	-	70
Total non-current liabilities	18,907	28,453
<b>Equity</b>		
Share capital and warrants	183,314	169,153
Contributed surplus	17,800	14,981
Deficit	(97,641)	(82,272)
Total equity attributable to equity holders of the Company	103,473	101,862
<b>Total liabilities and equity</b>	<b>\$ 142,877</b>	<b>\$ 135,475</b>

### *Cash and short-term investments*

Cash and short-term investments decreased by \$0.8 million during 2015 compared to December 31, 2014. The decrease is mainly due to the continued investment in the construction of the HPA Plant, research and development, general administration and HPA Plant operating expenses, partially offset by the \$15.0 million 2015 debentures issued, the \$7.6 million net loan received from Investissement Québec and the gross unrestricted \$13.3 million received from the secured debt financing.

### *Restricted cash*

Restricted cash (including short-term portion) decreased by \$12.2 million during 2015, compared to December 31, 2014. These funds include an amount of \$4.2 million (US\$3 million) borrowed under the Facility which may not be used until the restricted account release conditions are met (see liquidity and capital resources section). In 2014, the funds include the refundable 2012 and 2013 investment tax credits, as well as the interest earned on such deposits, which served as security for the 2012 convertible debentures. On October 16, 2015, the Company redeemed the entire outstanding 2012 debentures in the aggregate principal amount of \$25 million plus accrued interests and these funds were released to the Company according to the terms of the trust indenture agreement.

### *Sales taxes and other receivables*

Sales taxes and other receivables increased by \$0.1 million during 2015 compared to December 31, 2014. The increase of sales taxes (GST, QST and HST) receivable from the Federal and Provincial governments is primarily due to the increased level of activities of the Company in 2015 compared to 2014 and the construction of the HPA Plant.

### *Prepaid expenses and deposits*

Prepaid expenses and others increased by \$0.8 million during 2015, compared to the same period of 2014. The increase is mainly related to prepaid suppliers, transactions costs associated with the revolving credit facility and deposits.

### *Derivative financial instruments*

Derivative financial instruments decreased by \$0.4 million during 2015 compared to December 31, 2014. The decrease is due to a change in fair value pertaining to the Series Y subscription rights.

### *Investment tax credits and other government assistance receivable*

Investment tax credits and other government assistance receivable classified as current increased by \$7.6 million in 2015. The increase is mainly due to the 2015 investment tax credits receivable on the equipment purchased for manufacturing and processing in the Gaspé region in 2015.

Investment tax credits classified as non-current decreased by \$9.4 million during 2015, compared to December 31, 2014. The decrease is due to payments received from the tax authorities relating to the 2012 and 2013 fiscal years, which were pledged as security for the \$25 million convertible debentures issued in December 2012. The funds that the Company received upon reimbursement of the 2012 and 2013 investment tax credits were deposited in a segregated account and served as security for the 2012 convertible debentures.

#### *Property, plant, and equipment*

Property, plant, and equipment ("PP&E") increased by \$21.0 million in 2015 compared to 2014. The gross increase results from \$29.8 million of PP&E additions, before investment tax credits, is mainly attributable to the HPA Plant (which includes capitalized interest of \$3.6 million), partially offset by \$8.5 million investment tax credits.

#### *Patents and others*

Patents increased by \$0.4 million in 2015, compared to 2014. The increase is principally due to the costs resulting from 3 international patent applications, 20 national entry phases in various countries, 5 divisional applications in various countries (Australia, Canada and China), 3 continuation applications in USA as well as the patent application examination process cost in the respective national patent offices.

#### *Accounts payable, accrued liabilities*

Accounts payable and accrued liabilities increased by \$2.9 million in 2015, compared to 2014. This increase is mainly due to the ramp up in the construction of the HPA Plant.

#### *Short-term loan*

Short-term loan increased by \$11.8 million during 2015 compared to 2014 due to the \$7.6 million net loans from Investissement Québec and the revolving and short-term loan part of the secured debt financing completed in November 2015.

#### *Derivative financial instruments*

The Company has current derivative financial instruments, recognized on the Statement of Financial Position (refer to note 8 and 15 of the annual financial statements for a description of the convertible debentures), representing the estimated fair value of the convertible debentures holders' conversion option and the make-whole amount on the 2015 convertible debentures issued during the second quarter of 2015. During 2015, the derivative financial instrument liability increased by \$0.1 million compared to 2014 mainly due to the changes in the derivative's fair value and exercise of conversion option between the date of issuance and December 31, 2015.

#### *Convertible debentures liability*

Convertible debentures decreased by \$21.3 million during 2015, as compared to 2014. The decrease in convertible debentures liability is mainly due to the redemption of all outstanding 2012 debentures plus accrued interests and the exercise of the conversion option of the 2013 and 2015 convertible debentures (the 2015 convertible debentures having been issued in the second quarter of 2015).

#### *Long-term debt*

Long-term debt (including short-term portion) increased by \$12.3 million during 2015, as compared to 2014. The increase in long-term debt is due mainly to the secured debt financing issued in November 2015, the accretion of interest and the effect of changes in foreign exchanges rates partially offset by the gain from the debt renegotiation.

### Share capital and warrants

Share capital and warrants increased by \$14.2 million during 2015 compared to 2014, the increase is mainly due to the issuance of common shares as a result of the conversion of the 2013 and 2015 debentures, as well as following warrants and options exercised.

### Contributed surplus

Contributed surplus increased by \$2.8 million in 2015, compared to 2014, due to the recognition of share-based payments and warrants issued.

## RESULTS OF OPERATIONS

(in thousands of dollars, unless otherwise indicated)	Quarter ended December 31,		Year ended December 31,	
	2015	2014	2015	2014
Expenses				
Research and development charges, net of investment tax credits and other governmental assistance	\$ 610	\$ 493	\$ 1,903	\$ 1,794
General and administrative charges	1,863	1,440	6,027	6,682
HPA plant operations	1,422	1,050	4,416	3,591
Write-off for redesign	-	1,782	-	1,782
Other expense (income)	-	291	-	534
Loss before net finance income (expense) and income and mining taxes	3,895	5,056	12,346	14,383
Net finance expense (income)	2,915	(1,582)	3,023	(1,984)
Loss before income and mining taxes	6,810	3,474	15,369	12,399
Income and mining taxes				
Current	-	-	-	61
Deferred	-	-	-	(61)
	-	-	-	-
Net loss and comprehensive loss	\$ 6,810	\$ 3,474	\$ 15,369	\$ 12,399
Basic and diluted net loss per share	\$ 0.01	\$ 0.01	\$ 0.04	\$ 0.04
Weighted average number of shares outstanding	382,163,577	312,650,186	358,097,017	280,362,729

### Revenues

The Company is a development stage company and has no revenues.

### Research and development charges

Research and development charges are generally comprised of personnel related expenses (salaries and benefits), share-based payments, consultant expenses and material costs for Orbite's Technology Development Center in Laval. These charges are presented net of government research and development investment tax credits and other government assistance of \$27,000 and \$141,000 for the fourth quarter and the year ended December 31, 2015 respectively, compared to the same periods in 2014. The increase during the quarter and the year-end is due mainly to an increase in salaries, consulting fees, as well as a research and development investment tax credits adjustment resulting from a prior year tax assessment, partially offset by a decrease in lab consumables and repairs and maintenance. Moreover, for the year ended December 31, 2015 compared to the one in 2014 there has been a decrease in share-based payments partially offset by an increase in repairs and maintenance.

### *General and administrative charges*

General and administration charges consist mostly of personnel related costs (salaries and benefits), share-based payment expenses, consulting, accounting, business development, legal, and investor relation costs relating to head office activities. General and administrative costs increased by \$0.4 million during the quarter ended December 31, 2015 compared to the same period of 2014 and decreased by \$0.7 million during the year ended December 31, 2015 compared to 2014. The increase during the fourth quarter is attributable mainly to an increase in salaries, professional and consulting fees partially offset by a decrease in share-based payment while the decrease for the year ended December 31, 2015 compared to December 31, 2014 is mainly due to a decrease in share-based payments.

### *HPA Plant operations*

HPA Plant operations include administration, operating and maintenance costs for the HPA Plant in Cap-Chat. Costs incurred at the HPA Plant that directly relate to the installation of the equipment and the commissioning of the plant, and meet the IFRS criteria for capitalization, are capitalized in property, plant and equipment (PP&E). HPA Plant operation expenses increased by \$0.4 million during the quarter ended December 31, 2015, and increased by \$0.8 million for the year ended December 31, 2015, as compared to 2014. The increase during the fourth quarter compared to the one in 2014 is due mainly to salaries, consulting fees, training of personnel, environmental services and shared based payments partially offset by energy, repair and maintenance and security services. The increase during 2015 compared to 2014 is due mainly to salaries and consulting fees, training of personnel, insurance and shared based payments partially offset by environmental services and energy.

### *Other expense*

Other expense decreased by \$0.3 million and \$0.5 million for the fourth quarter and year ended December 31, 2015 compared to the same periods in 2014, as no other expense was incurred during the period ended December 31, 2015.

### *Share-based payments*

The Company has a common share purchase option plan (the "Option Plan") for its directors, officers and employees. Share-based payments, which are non-cash in nature, increased by \$0.4 million during the quarter ended December 31, 2015, and decreased by \$0.3 million for the year ended December 31, 2015, as compared to 2014. The increase during the fourth quarter is due mainly to share options granted to a consultant in lieu of payments. The decrease during the year is principally due to a lower weighted average fair value per share option granted in 2015 compared to 2014.

The following table details where the share-based payments have been recognized in the statements of comprehensive loss:

(in thousands of dollars, unless otherwise indicated)	Quarter ended December 31,		Year ended December 31,	
	2015	2014	2015	2014
Research and development	\$ 25	\$ 21	\$ 90	\$ 134
General and administration	575	184	1,170	1,444
HPA plant operations	34	(4)	97	22
Recognized in comprehensive loss	634	201	1,357	1,600
Capitalized in patents and others	-	8	-	8
Capitalized in property, plant and equipment	3	8	14	79
	\$ 637	\$ 217	\$ 1,371	\$ 1,686



### *Finance income*

Finance income, consisting primarily of interest income, decreased by \$0.2 million during the quarter ended December 31, 2015 and increased by \$0.05 million during the year ended December 31, 2015, as compared to the same periods in 2014. The decrease during the fourth quarter is due mainly to interest received along with the investment tax credits collected during the previous period prior to the fourth quarter of 2015.

### *Finance expense*

Finance expense, consisting of interest and transaction costs increased by \$0.2 million during the quarter and the year ended December 31, 2015, respectively, as compared to the same periods in 2014. The increases are mainly due to transaction costs related to the secured debt financing.

### *Other financial losses (gains)*

The Company recognized a loss of \$2.7 million during the quarter and the year ended December 31, 2015, respectively, compared to a gain of \$1.4 million and \$2.1 million for the same periods of 2014. These changes are mainly due to the mark to market adjustments relating to the 2013, series X and 2015 convertible debentures and the changes in fair value of derivative financial instruments. The Company also recognized a \$3.2 million loss on redemption of 2012 convertible debentures offset by a gain of \$1.3 million during the quarter and the year ended December 31, 2015, compared to the same periods in 2014. The \$1.3 million gain is due to the renegotiation of the terms regarding its government loans, which terms allowed to closed the secured debt financing in November 2015.

## **CASH FLOWS**

Consolidated Statements of Cash Flows				
(in thousands of dollars, unless otherwise indicated)	Quarter ended December 31,		Year ended December 31,	
	2015	2014	2015	2014
Cash flows				
Operations	\$ (3,543)	\$ (2,816)	\$ (11,232)	\$ (10,662)
Non-cash working capital items	(1,444)	(1,098)	602	(2,805)
Interest received	16	238	454	429
Interest paid	(402)	(500)	(2,084)	(2,000)
Operating activities	(5,373)	(4,176)	(12,260)	(15,038)
Financing activities	(7,556)	(1)	13,901	24,343
Investing activities	12,080	(4,067)	(2,896)	(16,236)
Net change in cash and cash equivalents	(849)	(8,244)	(1,255)	(6,931)
Cash and cash equivalents, beginning of period	2,572	11,222	2,978	9,909
Cash and cash equivalents, end of period	\$ 1,723	\$ 2,978	\$ 1,723	\$ 2,978

### *Cash Flows from Operating Activities*

Cash flows used in operating activities increased by \$1.2 million and decreased by \$2.8 million during the quarter and year ended December 31, 2015 respectively, compared to the same periods of 2014. Cash flows used for operations, which is cash flows used in operating activities, adjusted for certain non-cash working capital items and net interest payments, increased by \$0.7 and \$0.6 million for the quarter and the year ended December 31, 2015 respectively, compared to the same periods in 2014. Cash flows from non-cash working capital items increased by \$0.3 million and decreased by 3.4 million during the quarter and the year ended December 31, 2015 as compared to the same periods of 2014. The increase in cash flows used for

operations during the quarter is due mainly to HPA Plant operations and general administrative charges and the increase for the year ended December 31, 2015 is due mainly to HPA Plant operations offset by a reduction in general and administrative expenses. The increase in non-cash working capital items during the quarter ended December 31, 2015, is principally due to prepaid expenses, investment tax credit partially offset by a decrease in sales taxes. Whereas the decrease during the year ended December 31, 2015, is mainly due to sales taxes and other receivables and accounts payable and accrued liabilities partially offset by current income taxes and investment tax credits and other governmental assistance receivable.

#### *Cash Flows from Financing Activities*

Cash flows from financing activities decreased by \$7.6 million and by \$10.4 million during the quarter and the year ended December 31, 2015 compared to the same periods in 2014. The decrease for the quarter December 31, 2015 compared to 2014 is due mainly to the \$25 million redemption of 2012 convertible debentures offset by the proceeds from the long-term debt and short-term loan and the issuance of shares, warrants, rights and exercise of options. The decrease for 2015 year end compared to 2014 is principally due to lower proceeds from issuance of shares and the redemption of 2012 convertible debentures offset by lower debt financing received in 2014.

#### *Cash Flows used in Investing Activities*

Cash flows used in investing activities decreased by \$16.1 and \$13.3 million during the quarter and the year ended December 31, 2015 respectively, compared to the same periods in 2014. The decreases for the quarter and the year ended December 31, 2015 compared to the same periods in 2014 are due to changes in restricted cash and receipts from investment tax credits receivable on property, plant and equipment, partially offset by the investments in HPA Plant construction.

### **LIQUIDITY AND CAPITAL RESOURCES**

The Company is a development stage company that has not generated any revenues or significant cash flows from its operations. The Company's source of funding has primarily been from the sale of equity and debt securities, and to a lesser extent, earning interest income, which is highly dependent on the cash balances and prevailing interest rates. On February 3, 2016, the Company completed the first portion of the public offering of units in the amount of \$8.5 million under the short form base shelf prospectus and prospectus supplement dated March 18, 2015 and January 28, 2016 respectively. The gross proceeds are comprised of \$4 million raised on a bought deal basis, \$1.5 million raised pursuant to the partial exercise by the underwriter, of its underwriter's option (the "Underwriter's Option") together with \$2.9 million in outstanding supplier invoices, which have been converted into 2,938 units. On February 23, 2016, the underwriter exercised a portion of its Underwriter's Option to purchase an additional 1,060 units for gross proceeds of \$1.1 million. On March 4, 2016, the Company revised the terms of the Underwriter's Option, whereby the number of additional units that the underwriter may purchase for resale is increased by 1,762 units to a total of 7,762 units. In addition to the foregoing amendment, the Underwriter's Option, which was set to expire March 5, 2016, is extended and may now be exercised until close of business on April 15, 2016. For its services, the underwriter received 1 155 700 non-transferable broker warrants. Each broker warrant is exercisable into one share for a period of 36 months at a price of \$0.40 per share.

The annual financial statements have been prepared on a going concern basis, meaning on the basis that the Company will be able to realize its assets and discharge its liabilities in the normal course of operations.

The application of the going concern concept is dependent upon the Company's ability to satisfy its liabilities as they become due and to obtain the necessary financing to complete the construction of its HPA plant, the attainment of profitable operations or the receipt of proceeds from the disposition of its mineral property interests. The Company is a development stage corporation and has not generated revenue or cash flows

from its HPA plant, which is currently under construction. The Company's sole source of funding to this point has been the issuance of equity securities, debt and government grants. There can be no assurance that the HPA plant will operate successfully or economically, that the estimated capital costs will be sufficient to achieve the design capacity or the product purities and characteristics, or that the plant will provide a return on investment or become profitable.

In order to finance ongoing construction and subsequent commissioning of its HPA plant, the Company closed a \$10 million bought deal on April 6, 2015 and an additional \$5 million on May 6, 2015 (see note 8 of the December 31, 2015 Annual Financial Statements). On November 5, 2015, the Company completed secured debt financings (the "Facility") totaling up to \$22 million (US\$ 16.95 million) in the aggregate, and increased the amount of its second secured bridge loan with Investissement Québec to \$7.6 million from \$5 million (See note 7 and 9 of the December 31, 2015 Annual Financial Statements). Subsequent to year end, the Company completed a \$8.5 million bought deal financing on February 3, 2016 and an additional \$1 million on February 23, 2016. An additional 5,458 units, or \$5.5 million, remains outstanding under the Underwriter's Option that can be exercised by the underwriter until April 15, 2016. (see note 19 of the December 31, 2015 Annual Financial Statements).

The Company has no other committed sources of future financing as of the date of this MD&A other than the one mentioned above. As at the date of this MD&A, the Company has postponed certain activities necessary to complete the construction of the HPA plant in order to manage its working capital and limit construction costs. Management expects to start commercial production in the second quarter of 2016 and will need to raise new financing in order to complete the HPA plant and, in addition, requires funds for its monthly burn rate. If additional delays in reaching commercial production or in achieving positive cash flows from sales were to occur, the Company's working capital may be insufficient to meet its obligations. The Company currently does not have any executed sales orders pending achieving commercial production. The Company has certain potential alternative sources of financing including leveraging its investment tax credits, obtaining additional funding from an existing shareholder and the exercise of additional units under the Underwriter's Option. In addition, under its Facility, the Company has restrictive covenants to be met early in the second half of 2016 for which compliance will depend on the timing of completion of the HPA plant, timing and quantum of sales, and achieving positive cash flows from commercial production. If the Company does not comply with such covenant, management will need to obtain a waiver from its lender to avoid the consequences of the event of default.

If the going concern assumption were not appropriate for the financial statements, adjustments to the carrying value of assets and liabilities, reported expenses and statement of financial position classifications would be necessary. Such adjustments could be material and may occur in the near term.

As at December 31, 2015, the Company had an aggregate cash and short-term investments balance of \$2.6 million, and positive working capital (current assets less current liabilities) of \$4.2 million. Subsequent to year end, in fiscal 2016 to date, the Company has raised capital, strengthening its working capital position, with net proceeds of \$10 million through a bought deal financing and the exercise of share purchase warrants.

Following the February 3, and February 23 bought deal financing, the Company had, on a pro-forma basis, a cash and short-term investments balance of \$ 8.3 million and pro-forma working capital of \$12.8 million, net of fees and commission.

#### *10 million bought deal*

On April 6, 2015, Orbite completed the first portion of the public offering of units in the amount of \$10 million and an additional \$5 million on May 6, 2015, under the short form base shelf prospectus and prospectus supplement dated March 18 and March 30, 2015 respectively. Each unit consists of \$1,000 principal amount of 5% convertible unsecured unsubordinated debentures (the "Debentures") and 1,077 share purchase

warrants (each a "Warrant") of the Company. The Debentures mature on April 6, 2020 (the "Maturity Date") and bear interest at a rate of 5% per annum payable semi-annually.

Each Debenture is convertible, at the option of the holder at any time prior to the Maturity Date, into the number of shares computed on the basis of (i) the principal amount of the Debentures divided by the conversion price of \$0.325 per share (the "Conversion Price"), and (ii) an amount equal to the additional interest amount that such holder would have received if it had held the Debenture until the Maturity Date (the "Make-Whole Amount") divided by the then 5 day volume weighted average trading price of the shares on the TSX (the "Current Market Price"). The Make-Whole Amount shall be reduced by 1% for each 1% that the Current Market Price at time of conversion exceeds the Conversion Price. Each Warrant are exercisable into one share for a period of 36 months from their issue date at a price of \$0.39 per share.

For its services, Euro Pacific Canada Inc. received a cash commission of \$900,000 (equal to 6% of the gross proceeds raised) and 2,769,230 of non-transferable broker warrants (equal to 6% of the shares into which the principal of the Debentures sold are convertible). Each broker warrant is exercisable into one share for a period of 36 months at a price of \$0.39 per share.

The aggregate number of shares to be issued upon conversion of the Debentures and for any payment of the Make-Whole Amount shall not exceed the number of shares equal to the principal amount of the Debentures divided by \$0.325 less the 25% maximum discount allowable by the Toronto Stock Exchange.

#### *\$22M Secured Debt Financing*

On November 5, 2015, the Company completed a secured debt financing totalling up to \$22 million (US\$16.95 million) in the aggregate (the "Facility"). The Facility is comprised of a \$8.5 million (US\$6.5 million) revolving credit facility, term loan A of \$0.6 million (US\$0.45 million) and term loan B of \$13.0 million (US\$10.0 million). The credit facility and term loans will bear interest at the London Interbank Offered Rate (or Libor) rate, which shall be no less than 0.5% plus 6.5%.

A portion of the revolving credit facility and term loan A will be repayable as the Investment Tax Credits ("ITC") payments for the 2014 financial year are received by the Company, while the term loan B principal is repayable in 36 equal monthly installments starting December 1, 2016. The balance of the revolving credit facility will be used to finance the Company's eligible receivables. The Facility is subject to certain reporting, financial and other customary conditions. The Facility is secured by a 1st ranking hypothec on the universality of the Company's present and future movable and immovable assets, excluding the ITC receivables for the 2015 financial year, which are currently being financed by Investissement Québec ("IQ"). The Facility shall expire no later than November 4, 2019.

#### *Extension of \$2M Loan from Government of Québec*

On October 6, 2015, the Company entered into a revised agreement with the government of Québec regarding its \$2 million non-interest bearing loan contracted on March 24, 2010, whereby the first principal payment date was deferred to January 2020 and the last principal payment date in January 2024.

#### *Redemption of 2012 Convertible Debentures*

On October 16, 2015, the Company redeemed all outstanding 2012 debentures in the aggregate principal amount of \$25 million plus accrued interests. As per the terms of the Trust Indenture, for each \$1,000 principal amount of debentures redeemed, the Company issued 285.714 class A share purchase warrants exercisable until December 13, 2017 at a price of \$3.50. Accordingly, all of the security granted by the Company to secure the 2012 debentures were released and discharged.

### *Amendments to Contribution Agreements – CED*

On October 20, 2015, the Company entered into amendments to its contribution agreements with Canada Economic Development for the \$800,000 and the \$4.0 million of non-interest bearing secured loans contracted on September 4, 2009 and February 5, 2014, respectively. The amendments provide that the \$4.0 million loan payable in 10 semi-annual installments which were to begin in April 2017, have now been deferred to January 2020. The loans were initially secured by a first ranking movable hypothec against the Company's equipment located at the Company's high purity alumina production facility in Cap-Chat, Québec, which was replaced by a second ranking hypothec against the (i) Company's equipment located at its HPA production facility in Cap-Chat, Québec and its Development Technology Center in Laval, and (ii) the immovable comprised of the Company's HPA production facility in Cap-Chat, Québec.

### *Short-term loan*

The Company used a portion of proceeds of its November 5 financing, namely \$3.025 million, to repay in full the bridge loan contracted with IQ to finance the Company's 2014 ITCs. The security granted to IQ on the Company's 2014 ITC was subsequently discharged.

The Company also announced on November 5, 2015 that Investissement Québec ("IQ") had agreed to increase the amount of its second secured bridge loan, initially granted in June 2015 in the amount of \$5 million, to \$7.6 million. This loan is collateralized against the Company's ITC receivables for the 2015 and subsequent financial years, and is repayable upon receipt by the Company of ITC payments for the 2015 financial year from tax authorities, but in no event later than June 30, 2017. Other terms for the loan with IQ remain unchanged, with interest payable at prime (presently 2.7%) plus 3.5%.

### **Contingencies**

The Company may be subject to various contingent liabilities that occur in the normal course of its operations. The Company is not aware of any pending or threatened proceedings, which could potentially have a material adverse effect on the interim financial condition or future results of the Company.

### **Commitments**

As at December 31, 2015, the total purchase commitment for capital expenditures at the HPA project relating to equipment amounted to approximately \$2.0 million.

### **Contractual Obligations**

The Company expects to discharge its financial obligations related to the accounts payable and accrued liabilities and the short-term portion of the long-term debt with its working capital and the additional secured financing as described in the liquidity and capital section.

The following table presents the contractual maturities of the financial liabilities and operating leases as of December 31, 2015:

(in thousands of dollars, unless otherwise indicated)

	Carrying Amount	Contractual Cash flows	Payable within 1 year	Payable during		Payable After year 5
				Years 2 and 3	Years 4 and 5	
Accounts payable and accrued liabilities	\$ 8,071	\$ 8,071	\$ 8,071	\$ -	\$ -	\$ -
Short-term loan	11,768	13,246	5,410	7,836	-	-
Derivative financial instrument <sup>a)</sup>	108	-	-	-	-	-
Convertible debentures 2015 <sup>b)</sup>	113	224	9	18	197	-
Long-term debt	16,422	21,192	1,451	9,552	5,669	4,520
Operating leases	-	375	375	-	-	-
Purchase obligations	-	1,990	1,990	-	-	-
	\$ 36,482	\$ 45,098	\$ 17,306	\$ 17,406	\$ 5,866	\$ 4,520

a) The embedded derivative has no outflows since it is included in the 2015 convertible debentures.

b) Includes interest outflows at 5%.

## OFF BALANCE SHEET ARRANGEMENTS

The Company has certain off-balance sheet arrangements, consisting of leasing certain premises and equipment under the terms of operating leases and contractual obligations in the normal course of business.

## TRANSACTIONS WITH RELATED PARTIES

During the year ended December 31, 2015, the Company incurred \$377,000 (2014 - \$273,000), in professional fees from a law firm where a Board member, Pierre Meunier, is an equity partner at Fasken Martineau DuMoulin S.E.N.C.R.L., s.r.l. These transactions took place in the normal course of operations and were measured at the exchange amount, which is the amount established and accepted by the parties.

## SUMMARY OF QUARTERLY RESULTS

The following table sets out selected quarterly financial information for each of the last eight quarters:

Quarter ended	Net loss and comprehensive loss (\$) (in thousands of dollar)	Net loss per share (\$)
December 31, 2015	6,810	0.01
September 30, 2015	2,133	0.01
June 30, 2015	3,740	0.01
March 31, 2015	2,686	0.01
December 31, 2014	3,474	0.01
September 30, 2014	229	-
June 30, 2014	4,285	0.01
March 31, 2014	4,411	0.02

The decrease in net loss during the second quarter of 2014 compared to the first quarter of 2014, is mainly due to a decrease in financing fees and general and administrative charges. For the quarter ended September 30, 2014, the net loss was impacted favorably due to the recognition of the change in fair value of the derivative financial instruments relating to the series X convertible debentures.

For the quarter ended December 31, 2014, the net loss increase compared to the third quarter of 2014 was principally due to a \$1.8 million write-off following the redesign of the plant and a lower amount recognized in the change in fair value of the derivative financial instruments relating to the series X convertible debentures.

The decrease in net loss during the first quarter of 2015 compared to the last quarter of 2014 is mainly due to a decrease in research and development, general and administrative, and HPA Plant operations as well as

the absence of some costs such as the 2014 write-off following the redesign and other expenses pertaining to the flow-through shares.

The net loss increase in the second quarter of 2015 compared to the first quarter of 2015, is due mainly to an increase in share-based payments expense following the grant of options during the second quarter as well as an increase in salaries.

The decrease in net loss during the third quarter of 2015 compared to the second quarter of 2015 is principally due to a decrease in general and administration, research and development and transaction costs.

The increase in net loss during the fourth quarter of 2015 compared to the third quarter of 2015 is principally due to the acceleration of the accrete interest related to the redemption of all outstanding 2012 debentures as well as an increase in general and administrative charges and the HPA Plant operations.

## **Financial Instruments and Risk Management**

### *Fair Value of financial instruments*

A detailed description of the methods and assumptions used to measure the fair value of the Company financial instruments and their fair value are discussed in Note 15 – Financial instruments of the unaudited interim condensed financial statements for the quarter and year ended December 31, 2015.

### *Financial Risk Management*

For a detailed description of nature and extent of risks arising from financial instruments, and their related risk management, refer to Note 15 of the unaudited interim condensed financial statements for the quarter and year ended December 31, 2015. The Company is not aware of any significant changes to its risks factors from those disclosed at that time.

## **RISKS AND UNCERTAINTIES**

In the course of its business and affairs, the Company faces, amongst others, the following risk and uncertainties:

### **Risks Associated With Our Business**

*Recent increase in budgeted capital costs will require additional financing and may adversely impact our prospects*

The Company's current financial resources are not sufficient to cover the additional construction costs to complete the construction and commissioning of its HPA Plant, and phases 2A and 2B of its development plan, and the Company will require additional financing. Financing alternatives considered by management, including leveraging 2016 Investment Tax Credits, may not be available or successful, and will be dependent, among other things, on potential lenders' and investors' assessment of the Company's prospects and financial condition, their willingness to lend it funds and/or invest in its securities, and the terms required for any such lending and/or investment. Additional financing may be highly dilutive to current shareholders and holders of convertible debt, and may be at terms which are more expensive and less favorable than financings completed previously. Our current credit facilities contain restrictive covenants that limit our ability to incur additional indebtedness and grant security interests on our assets, which may reduce some financing alternatives. The Company's inability to access additional financing will have an impact on its financial condition, results of operations and prospects and could impair its ability to continue as a going concern. The start of commercial production in the second quarter of 2016 will be largely dependent on the Company's

ability to timely secure additional financing to complete construction of its HPA Plant. Delays in securing additional financing may further delay the start of commercial production. Our credit facilities contain financial covenants which in order to be satisfied, require commercial operation of our HPA Plant. Our borrowings under such facilities include an amount of US\$3 million which may not be used until the Company starts producing HPA on a commercial basis and completes a sale. If we are unable to successfully start commercial production or if we incur delays in starting commercial production and are not able to obtain waiver of covenant defaults from our lender, we may be unable to access the restricted portion of our borrowings and may be faced with the acceleration of our reimbursement obligations under our credit facilities.

*We will need to raise capital to continue our growth.*

Orbite is a development-stage company, with one main short-term project and multiple future projects, each with different funding requirements, has limited financial resources, and has currently no recurring cash flows from its operations. We require additional funding. If we cannot obtain capital through financings or otherwise, our ability to execute our development plans and achieve profitable operational levels will be greatly limited. Historically, we have funded our operations through the issuance of equity and debt financing arrangements. We may not be able to obtain additional financing on favorable terms, if at all. Our future cash flows and the availability of financing will be subject to a number of variables, including demand for HPA and SGA as well as other by-products. Our current credit facilities contain restrictive covenants that limit our ability to incur additional indebtedness and grant security interests on our assets, and may reduce some financing alternatives. Our inability to access additional capital for our operations and projects will have a material adverse effect on our business, financial condition, results of operations, prospects and could also eventually impair our ability to continue as a going concern.

Our investment in the HPA Plant is, among other things, based on the assumption that material portions of the investment will be refunded by the Government of Québec by way of refundable tax credits. There can be no assurance that these tax credits will be available and, if available, that same will be refunded by the Government of Québec in a timely manner. The unavailability of the tax credits or any delay in obtaining a refund of the tax credits could have a material adverse effect on the Company.

*We may be subject to cost overruns, delays, labor shortages, labor unrest and other construction risks*

The completion of construction and commissioning of our HPA Plant, its conversion to the chloride production process, its increase of production capacity, the completion of our contemplated SGA feasibility study and the building and operation of the SGA Plant will require substantial engineering, construction and operating expertise and execution. Cost estimates for these projects have increased over initial estimates. Potential cost overruns and completion delays are significant risks in projects of this nature due to many factors, including, without limitation, weather and seasonal factors affecting construction projects generally; delays in obtaining, or conditions imposed by, regulatory approvals; design errors; non-performance by third party contractors; increases in material or labor costs; construction performance falling below expected levels of output or efficiency; breakdown or failure of equipment or processes; contractor or operator errors; labor disputes, disruptions or declines in productivity; inability to attract sufficient numbers of qualified workers; changes in project scope; violation of permit requirements; and major incidents and/or catastrophic events such as fires, explosions, earthquakes or storms. There can be no assurance that these projects will be successfully completed within estimates, on schedule, or at all.

*The Company is dependent on a single principal asset*

Orbite's principal asset is its HPA Plant which has not yet begun production on a commercial scale as contemplated by Orbite. Any adverse development affecting the HPA Plant would materially adversely affect Orbite's financial condition, results of operations, prospects and its ability to continue as a going concern.



#### *The Company has negative cash flows from operations*

Orbite currently generates negative cash flows from operations, due to the expenses incurred developing its technologies and completing the construction of and optimizing its HPA Plant. Further, Orbite has not yet commercialized its product.

#### *We may be unable to retain key employees, management personnel or other employees*

The loss of any of our key management personnel would have an adverse impact on our future development and could impair our ability to succeed. Our performance is substantially dependent upon the expertise of key management personnel and our ability to continue to hire and retain such personnel. Efficient production of HPA and SGA using modern techniques and equipment requires skilled technicians and engineers. Our ability to attract, hire and train the necessary number of such personnel could have an adverse impact on our labour costs and ability to reach planned production levels.

*If our competitors misappropriate unpatented proprietary know-how and our trade secrets, it may have a material adverse effect on our business.*

The loss of or inability to enforce our patents, intellectual property and other proprietary know-how, and trade secrets (collectively our “Intellectual Property”) could adversely affect our business. We depend heavily on our Intellectual Property and the design expertise of our employees. If any of our competitor’s copies or otherwise gains access to our Intellectual Property or develops similar technologies or processes independently, we would not be able to compete as effectively. The measures we take to protect our Intellectual Property and design expertise may not be adequate to prevent their unauthorized use. Further, the laws of foreign countries may provide inadequate protection of such Intellectual Property rights. We may need to bring legal claims to enforce or protect such Intellectual Property rights. Any litigation, whether successful or unsuccessful, could result in substantial costs and diversions of resources. In addition, notwithstanding the rights we have secured in our Intellectual Property, other persons may bring claims against us that we have infringed on their intellectual property rights or claims that our Intellectual Property right interests are not valid. Any claims against us, with or without merit, could be time consuming and costly to defend or litigate and, therefore, could have an adverse effect on our business.

#### *New Markets*

The success of our business will depend, in part, on the establishment of new markets by us or third parties for alumina and rare earth products that may be in low demand. Although rare earth products are used in critical existing and emerging technologies, such as hybrid and electric vehicles, wind power turbines and LED lighting, the success of our business depends on creating new markets and successfully commercializing rare earth products in existing and emerging markets. Any unexpected costs or delays in the commercialization of any of the foregoing products and applications could have a material adverse effect on our financial condition and results of operations.

#### *Alumina, rare earth and metal oxide prices and PEA disclosure*

Our revenues, if any, are expected to be in large part derived from the extraction and sale of high purity alumina, alumina and rare earth and metal oxide by-products such as gallium and scandium. Alumina and rare earth and metal oxides prices are volatile, have historically fluctuated widely and are affected by numerous factors beyond our control, including: international, economic and political trends; expectations of inflation; currency exchange fluctuations; interest rates; global or regional consumptive patterns; speculative activities; and increased worldwide production levels due to new extraction developments and improved extraction and production methods. The development of new alumina refineries and aluminum smelters, and increased production by new or existing alumina and aluminum producers may create oversupply or

overcapacity, which could reduce future prices of alumina, alumina-based chemicals and aluminum, thereby adversely affecting Orbite's prospects and financial position. Moreover, demand for alumina, alumina-based chemicals and aluminum, has been supported by the industrialization and urbanization of China and other developing countries. A decline in the rate of economic growth of these developing countries or in other parts of the world, or a reduction in demand for these products, could adversely affect Orbite's future financial performance. These factors may affect the price of alumina and rare earth and metal oxides, and, therefore, the economic viability of any of our current or future exploration projects cannot accurately be predicted. Future significant price declines in the market value of alumina and rare earth and metal oxides could cause continued development of, and eventually commercial production (if any) from, the Grande-Vallée property to be rendered uneconomic. Depending on the price of alumina and rare earth and metal oxides, we could be forced to discontinue exploration or development activities and may lose our interest in, or may be forced to sell, the Grande-Vallée property. There is no assurance that even if commercial quantities of alumina and rare earth and metal oxides and other base and precious metals are produced, a profitable market will exist for them.

Preliminary economic assessment of the viability of the Company's proposed SGA production plant supposes the availability of natural gas as the reference energy source. Natural gas is not currently readily available in the mining site vicinity. Consequently, should natural gas or an alternative source of energy which pricing is competitive to natural gas not be available, the SGA Plant project contemplated to be based in the Grande-Vallée region could be materially and adversely impacted and compromised.

#### *Capital Cost Estimates*

Any capital and operating cost estimates made in respect of our current and future production facilities, including our HPA and our projected SGA production facilities, and mines may not prove to be accurate. Production of alumina and rare earths and metal oxides by-products is a capital-intensive business. Our plans for our HPA and projected SGA production facilities require significant capital expenditures. Capital and operating costs are estimated based on the interpretation of geological data, preliminary studies, preliminary economic assessments, anticipated climatic conditions and a number of other factors. Any of the following events could affect the accuracy of such estimates: unanticipated changes in grade and tonnage of ore to be mined and processed; incorrect data on which engineering assumptions are made; efficiency of our proprietary process, availability of fossil fuels at market prices, delay in construction schedules; unanticipated transportation costs; accuracy of major equipment and construction cost estimates; labour negotiations; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas on exportation of minerals); and title claims.

#### *Production*

Our proprietary alumina and by-products extraction processes are novel, untested on a commercial scale and the results may be uncertain and subject to significant variations. There can be no assurance that our proprietary processes will be efficient or commercially viable or that any such alumina or by-products production which is attempted will be profitable.

#### *Exploration and Mining Risks*

Mineral exploration is highly speculative and involves a high degree of risk, which evens a combination of careful evaluation, experience and knowledge may not be able to avoid. Most exploration efforts are not successful in that they do not result in the discovery of mineralization of sufficient quantity or quality to be profitably mined. There is no assurance that ores will be discovered by the Company in quantities sufficient to warrant mining operations. There is also no assurance that the mining properties of the Company will be brought into commercial production. These risks include market fluctuations, the proximity and production capacity of mining facilities and processing equipment, possible claims of native peoples and government

regulations, including regulations relating to prices, royalties, allowable production, import and export of minerals, environmental protection and the protection of agricultural territory. The effect of these factors cannot be accurately predicted. In addition, the mining of minerals involves numerous hazards, including but not limited to, variations in grade, deposit size, density and other geological problems, hydrological conditions, metallurgical and other processing problems, mechanical equipment performance problems, the unavailability of materials and equipment including fuel, labor force disruptions, unanticipated transportation costs, unanticipated regulatory changes, unanticipated or significant changes in the costs of supplies and adverse weather conditions.

The Company has not completed a comprehensive feasibility study and there can be no assurance that the development of the Company's mineral project into a commercially viable mine and the commercialization of the Company's alumina (and other material) extraction process into a commercially viable business opportunity, will be successful.

#### *Environmental and Other Regulatory Requirements*

All phases of mining and exploration operations are subject to government regulation including regulations pertaining to environmental protection. Environmental legislation is becoming stricter, with increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and heightened responsibility for companies and their officers, directors and employees. There can be no assurance that possible future changes in environmental regulation, mining laws including increased governmental royalty requirements will not adversely affect the Company's operations. As well, environmental hazards may exist on a property in which the Company holds an interest, that were caused by previous or existing owners or operators of the properties and of which the Company is not aware at present. Operations at the Company's mines are subject to strict environmental and other regulatory requirements, including requirements relating to the production, handling and disposal of hazardous materials, pollution controls, health and safety and the protection of wildlife. The Company may be required to incur substantial capital expenditures in order to comply with these requirements. Any failure to comply with the requirements could result in substantial fines, delays in production, or the withdrawal of the Company's mining licenses.

Government approvals and permits are required to be maintained in connection with the Company's mining and exploration activities. Although the Company currently has all the required permits for its operations as currently conducted, there is no assurance that delays will not occur in connection with obtaining all necessary renewals of such permits for the existing operations or additional permits for any possible future changes to the Company's operations, including any proposed capital improvement programs. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may be liable for civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Amendments to current laws, regulations and permitting requirements, or more stringent application of existing laws, may have a material adverse impact on the Company resulting in increased capital expenditures or production costs, reduced levels of production at producing properties or abandonment or delays in development of properties.

#### *Mineral Resource Estimates*

The Company's reported mineral resources are only estimates. No assurance can be given that the estimated mineral resources will be recovered or that they will be recovered at the rates estimated. Mineral resources estimates are based on limited sampling, and, consequently, are uncertain because the samples may not be representative. Mineral resource estimates may require revision (either up or down) based on actual production experience. Market fluctuations in the price of metals, as well as increased production costs or

reduced recovery rates, may render certain mineral resources uneconomic and may ultimately result in a restatement of estimated resources and/or reserves. Moreover, short-term operating factors relating to the mineral resources may adversely affect the Company's financial results in any particular accounting period.

#### *Title to Properties*

Although the Company has taken reasonable measures to ensure proper title to its properties, there is no guarantee that title to any of its properties will not be challenged or impugned. Third parties may have valid claims underlying portions of the Company's interests.

#### *Industry Conditions*

Mineral resource exploration and development involves a high degree of risk that even a combination of careful assessment, experience and know-how cannot eliminate. Few properties that undergo prospecting ever generate a producing mine. Substantial sums may be required to establish reserves, develop metallurgical processes and build mining and processing facilities at a given site. The Company's growth depends on the implementation of our mining plan and the commissioning of our HPA production facility at Cap-Chat, Québec. In addition, the Company will be adversely affected if it does not successfully implement new technologies and scale its proprietary process to commercial levels. There can be no assurance that the exploration and development programs planned by the Company will result in a profitable mining operation. The economic life of a mineral deposit depends on a number of factors, some of which relate to the particular characteristics of the deposit, particularly its size, grade and proximity to infrastructure, as well as the cyclical nature of metal prices and government regulations, including those regarding prices, royalties, production limits, importation and exportation of minerals, and environmental protection. The impact of such factors cannot be precisely assessed, but may prevent the Company from providing an adequate return on investment.

#### *Competition*

The global aluminum and alumina markets are dominated by a small number of large vertically integrated companies, including Rio Tinto Alcan, Alcoa, Chalco, RUSAL, Hydro Aluminium, Alumina Limited and BHP Billiton. These companies dominate on a global scale the mining of bauxite, the refining of alumina and the production and sale of aluminum. In addition, there are a number of smaller companies with projects to mine, refine and sell alumina. There are also several small and large companies active in the refining, production and sale of rare earths and other metals of the nature expected to be produced as by-products of our contemplated operations. The Company also competes with such companies and other natural resource companies in the acquisition, exploration, financing and development of new properties and projects. Many of these companies are more experienced, larger and better capitalized than the Company. In particular, such companies may be less vulnerable to volatility in the alumina market. The competitive position of the Company depends upon its ability to obtain sufficient funding and to explore, acquire and develop new and existing mineral-resource properties or projects in a successful and economic manner. Some of the factors which allow producers to remain competitive in the market over the long term are the quality and size of an ore body, cost of production and operation generally, and proximity to market. The Company also competes with other mining companies for skilled geologists and other technical personnel. In addition, the market for alumina and rare earth and metal oxide by-products is limited and the Company will compete with other mining companies for customers. An increase in the global supply of these products and predatory pricing by our competitors could materially adversely affect our operating or financial results.

#### *Permits and Licenses*

The operations of the Company require licenses and permits from various governmental authorities. There can be no assurance that the Company will be able to obtain all necessary licenses and permits that may be

required to carry out further exploration, development and mining operations at its projects, or that the conditions of such are affordable.

#### *Absence of feasibility studies*

No pre-feasibility study or feasibility study pursuant to the requirements of NI 43-101 has been completed to date by the Company. As such, the information provided herein does not constitute a “preliminary feasibility study”, a “pre-feasibility study” or a “feasibility study” within the meaning of NI 43-101. In addition, no independent preliminary economic assessment has been completed in connection with the construction, design and operation of HPA Plant. There are no assurances that the HPA Plant and the contemplated SGA Plant projects will be completed as expected or that the estimated capital costs will be sufficient to achieve the plant as expected, the design capacity or the product purities and characteristics, or that the respective plants will provide a return on investment or be profitable.

#### *Access to Raw Materials and Inputs for Production*

Production of high purity alumina, alumina and rare earth and metal oxide by-products depends upon access to power, water, raw materials, aluminum hydroxide, hydrochloric acid, and other inputs. The viability of the Company's SGA production facility will depend upon the availability of natural gas or comparable fossil fuels. Instability in natural gas and electrical supply and outages could delay production and of increase the cost of our operations. Volatility in the price of raw materials used in the production of high purity alumina, alumina and other rare earth minerals, disruptions in transportation services due to labour disputes or adverse weather, decrease in available water supply may have a material adverse effect on our financial condition or results of operations.

#### *Joint Ventures*

The Company intends to participate in joint ventures and strategic alliances. There can be no assurance that the Company will be able to find suitable partners and/or enter into joint venture agreements under suitable terms. Moreover, whether or not the Company holds majority interests or maintains operational control in such arrangements, its partners may have economic or business goals that are inconsistent with or opposed to those of the Company; exercise veto rights so as to block actions that the Company believes are in its best interests, take actions contrary to the Company's policies or objectives, be unable or unwilling to fulfill their obligations under the joint venture, strategic alliance or other agreement. There can be no assurance that its joint ventures will be beneficial to the Company, whether due to the above described risks, unfavorable global economic conditions, increases in construction costs, currency fluctuations, political risks or other factors.

#### *Development Goals and Time Frames*

The Company sets goals for and makes public statements regarding timing of the accomplishment of objectives material to its success, such as the commencement and completion of commercial production of its HPA Plant, discussions regarding strategic partnerships, and the timing of the release of its SGA feasibility study. The actual timing of these events can vary dramatically due to factors such as delays or failures in Orbite's contemplated financings, the uncertainties inherent in the environmental and mining regulatory approval process, and delays in achieving production or marketing milestones necessary to commercialize its products. There can be no assurance that the Company will be able to adhere to its current schedule for production and sale of HPA, SGA or any other product. If Orbite fails to achieve one or more of these milestones as planned, it could have a material adverse effect on the business carried on by the Company.

#### *Changes to Royalty Regime*

Crown royalties are determined by government regulation and are generally calculated as a percentage of the value of the gross production. The rate of royalties payable generally depends in part on prescribed reference

prices, geographical location, field discovery date, method of recovery, and the type or quality of the ore produced. There can be no assurance that the Government of Québec, the Government of Canada or any other government having jurisdiction over the Company will not adopt a new royalty regime or modify the methodology of royalty calculations which could increase the royalties paid by the Company. An increase in royalty could reduce the Company's earnings and/or it could make capital expenditures by the Company uneconomic.

*Our business is subject to risks that may not be covered by insurance*

The construction of a commercial production plant, the exploration for aluminous clay and the production of alumina and the refining, storage, transportation and marketing of alumina and by-products involve many risks. These risks include equipment failures and other accidents, weather conditions, natural disasters and changes to the regulatory environment, any of which could result in personal injury or damage or destruction to the site, equipment, the refinery and the environment as well as the interruption of construction and operations. The impact of these risks upon the Company is increased because of its dependence on a limited number of projects. The Company is insured against some, but not all, potential risks appropriate to its stage of development; however there can be no assurance that such insurance will be adequate to cover any losses or exposure to liability. As the HPA Plant continues to develop toward commercial operation, the Company will have to acquire additional insurance coverage. There can be no assurance that the Company will be able to acquire adequate insurance coverage for the future increases in construction and operational activities contemplated by the Company. The Company may also become subject to liability for pollution or other hazards against which it cannot insure or against which it may elect not to insure because of high premium costs or other reasons. The Company may also become subject to liabilities which exceed policy limits. In such circumstances, the Company may be required to incur significant costs that could have a material adverse effect upon its performance, results of operations and economic viability.

*Litigation*

The Company may become involved in, named as a party to, or the subject of, various legal proceedings, as well as contract disputes, regulatory proceedings, tax proceedings and legal actions relating to property damage, property taxes, land rights, and the environment, title claims, land tenure disputes, environmental claims, and occupational health and safety claims. The outcome with respect to future proceedings cannot be predicted with certainty and may be determined adversely to the Company and as a result, could have a material adverse effect on the Company's assets, liabilities, business, financial condition and results of operations. Even if the Company prevails in any such legal proceedings, the proceedings could be costly and time-consuming and would divert the attention of management and key personnel from the Company's business operations, which could adversely affect the Company's financial condition and results of operations.

*Production Delays*

Since the beginning of the construction of its HPA production facility, the Company has been subject to several construction and commissioning delays caused by both internal and external factors. Additional delays in the construction and commissioning of the HPA production facility are possible. Each such additional delay (if any) may defer commercial production and require the Company to divert working capital to fund fixed monthly burn rate costs instead of construction and commissioning expenses. Should the Company not meet its objective to begin commercial production in Q2 of 2016, the Company will be in breach of a financial covenant under the November 2015 credit facilities (see risk entitled "Credit Facilities"), unless a waiver of such covenant is granted by the lender.

### *Credit Facilities*

The Company is party to credit facilities with an institutional US based lender, which credit facilities and underlying loans are contingent on several contractual covenants and restrictions. These covenants, subject to certain prescribed exceptions, include restrictions on subscribing other debt, distributions of assets, liens on assets of the Company, corporate reorganizations, purchase of assets, amendment to material agreements and starting new businesses, all of which create restrictions on business operations. The Company is also required to meet ongoing financial covenants (including operating cash flow to fixed charges financial ratios — first of which financial covenant is to be met by July 31, 2016), solvency conditions and cannot be subject to the occurrence of events deemed to have adverse material effects on the affairs of the Company. Should the Company find itself in breach of any such covenants and restrictions, such breach shall be deemed a default under the credit facilities and may lead to enforcement proceedings by the lender, including recall of loaned amounts, seizure of assets of the Company (including its HPA production facility) and imposition of penalties and higher rate interest payments, any of which could adversely affect the operations of the Company on a going forward basis. The debt financing may also lead to diversion of cash flow to satisfy debt-servicing obligations.

### *Risks Related To Our Common Shares*

The trading price of our Common Shares has and may continue to fluctuate significantly and shareholders may have difficulty reselling their Common Shares.

During the last 12 months, our Common Shares have traded as low as \$0.20 and as high as \$0.50 on the TSX. Our Common Shares are also listed on the OTCQX, an over-the-counter trading facility. In addition to volatility associated with over-the-counter securities in general, the market price of our Common Shares could decline due to the impact of any of the following factors:

- changes in the demand for HPA, alumina, aluminum or rare earths and metal oxides;
- disappointing results from our marketing and sales efforts;
- failure to meet our revenue or profit goals or operating budget;
- decline in demand for our Common Shares;
- downward revisions in securities analysts' estimates or changes in general market conditions;
- lack of funding generated for operations;
- delays in the construction of our projected SGA and other facilities and increased costs related to our HPA and projected SGA production facilities;
- short selling, manipulation of our Common shares and prohibited trades;
- unfounded rumours and collusion;
- under performance or other performance related issues affecting our HPA production facility;
- investor perception of our industry or our business prospects; and
- general economic trends.

In addition, stock markets have experienced extreme price and volume fluctuations and the market prices of securities have been highly volatile. These fluctuations are often unrelated to operating performance and may adversely affect the market price of our Common Shares.

*Additional issuances of equity securities may result in dilution to our existing shareholders*

Our Articles of Incorporation authorize the issuance of an unlimited number of class A Shares. Our Board of Directors has the authority to issue additional class A shares to provide additional financing in the future and the issuance of any such shares may result in a reduction of the book value (on a per share basis) or market price of the outstanding shares. If we do issue any such additional shares, such issuance also will cause a reduction in the proportionate ownership and voting power of all other shareholders. Further, any such issuances could result in a change of control.

*Our Common Shares are classified as a “penny stock” under SEC Rules, which limits the market for our Common Shares.*

Because our Common Shares are not traded on the NASDAQ National Market or the NASDAQ Capital Market, and because the market price of the Common Shares is less than \$5 per share, our Common Shares are classified as a “penny stock”. SEC Rule 15c-9 under the U.S. Securities Exchange Act of 1934 imposes additional sales practice requirements on broker-dealers that recommend the purchase or sale of penny stocks to persons other than those who qualify as an “established customer” or an “accredited investor”. This includes the requirement that a broker-dealer must make a determination that investments in penny stocks are suitable for the customer and must make special disclosures to the customers concerning the risk of penny stocks. Many broker-dealers decline to participate in penny stock transactions because of the extra requirements imposed on penny stock transactions. Application of the penny stock rules to our Common Shares reduces the market liquidity of our Common Shares, which in turn affects the ability of holders of our Common Shares to resell the Common Shares they purchase, and they may not be able to resell at prices at or above the prices they paid.

*We are a Canadian company and most of our directors and officers are Canadian citizens and/or residents, which could make it difficult for investors to enforce judgments against them or us in the United States.*

We are a company incorporated under the laws of Canada and most of our directors and officers reside in Canada. Therefore, it may be difficult for investors to enforce any judgments obtained against us or any of our directors or officers within the United States. All or a substantial portion of such persons’ assets may be located outside the United States. As a result, it may be difficult for investors to effect service of process on us or our directors or officers, or enforce any judgments obtained against us or our officers or directors within the United States, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof. Consequently, you may be effectively prevented from pursuing remedies under U.S. federal securities laws against them or us. In addition, investors may not be able to commence an action in a Canadian court predicated upon the civil liability provisions of the securities laws of the United States. There may be doubt as to the enforceability, in original actions in Canadian courts, of liability based upon the U.S. federal securities laws and as to the enforceability in Canadian courts of judgments of U.S. courts obtained in actions based upon the civil liability provisions of the U.S. federal securities laws. Therefore, it may not be possible to enforce those actions against us or any of our directors or officers.

*A decline in the price of our Common Shares could affect our ability to raise further working capital and adversely impact our operations.*

A decline in the price of our Common Shares could result in a reduction in the liquidity of our Common Shares and a reduction in our ability to raise additional capital for our operations. Because our operations to date have been principally financed through the sale of equity securities, a decline in the price of our Common Shares could have an adverse effect upon our liquidity and our continued operations. A reduction in our ability to raise equity capital in the future would have a material adverse effect upon our business plan and operations, including our ability to continue our current operations. If our Common Share price declines, we



may not be able to raise additional capital or generate funds from operations sufficient to meet our obligations.

#### *Listing of our Common Shares*

The listing of our Common Shares on the TSX is conditional upon our ability to maintain the applicable continued listing requirements of the TSX. The TSX may consider the delisting of the Common Shares if, in its opinion, it appears the Company is in serious financial difficulty or if there is significant doubt regarding its ability to continue as a going concern. In such circumstances, the TSX may place Orbite under a delisting review that could lead to the delisting of its Common Shares from the TSX.

If the Common Shares are delisted from the TSX, they may be eligible for listing on a substitute exchange, such as the TSX Venture Exchange. In the event that Orbite is not able to maintain a listing for the Common Shares on the TSX or a substitute exchange, it may be extremely difficult or impossible for shareholders to sell their Common Shares in Canada. Moreover, if Orbite is delisted from the TSX, but obtains a substitute listing for the Common Shares, the Common Shares may have less liquidity and more price volatility than experienced on the TSX. Shareholders may not be able to sell their Common Shares on any such substitute exchange in the quantities, at the times, or at the prices that could potentially be available on a more liquid trading market. As a result of these factors, if the Common Shares are delisted from the TSX, the price of the Common Shares may decline and the Company's ability to obtain financing in the future could be materially impaired.

### **CRITICAL ACCOUNTING ESTIMATES**

The preparation of the financial statements in conformity with IFRS requires management to make judgements, estimates, and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, and expenses. Management's best estimates concerning the future are based on the facts and circumstances available at the time estimates are made. Management uses historical experience, general economic conditions and trends, as well as assumptions regarding probable future outcome as the basis for determining estimates. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future period affected (refer to note 3 c) of December 31, 2015 Annual financial statements for details relating to judgments and sources of estimation uncertainty that impact the company).

### **ADOPTION OF NEW ACCOUNTING STANDARDS, AMENDMENTS AND INTERPRETATIONS DURING THE YEAR**

The annual financial statements have been prepared in accordance with accounting policies which are consistent with those of the previous financial year.

#### **New standards and interpretations not yet adopted**

We have reviewed new and revised accounting pronouncements that have been issued, but are not yet effective. Refer to Note 3 a) and Note 3 b) of the financial statements for further information. We are still evaluating the potential impact of future accounting standard changes on our financial reporting.

## **DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING**

Disclosure controls and procedures (“DC&P”) are procedures designed to provide reasonable assurance that all relevant information required to be disclosed in documents filed with securities regulatory authorities is recorded, processed, summarized and reported on a timely basis, and is accumulated and communicated to management, including its CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. Management, including the CEO and the CFO, does not expect that the Company’s DC&P will prevent or detect all error and all fraud. The inherent limitations in all control systems are such that they can provide only reasonable, not absolute, assurance that all control issues and instances of fraud or error, if any, within the Company have been detected.

Multilateral Instrument 52-109 (“MI 52-109”), “Certification of Disclosure in Issuers’ Annual and Interim Filings”, issued by the Canadian Securities Administrators (“CSA”) requiring CEOs and CFOs to certify that they are responsible for establishing and maintaining Disclosure Controls for the issuer, that DC&P have been designed to provide reasonable assurance that material information relating to the issuer is made known to them, that they have evaluated the effectiveness of the issuer’s DC&P, and that their conclusions about the effectiveness of those DC&P at the end of the period covered by the relevant annual filings have been disclosed by the issuer.

MI 52-109 also requires the CEO and CFO to certify that they are responsible for establishing and maintaining internal controls over financial reporting (“ICFR”), as defined by the CSA, that the ICFR have been designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS, and that the Company has disclosed any changes in its ICFR during its most recent interim period that has materially been affected, or is reasonably likely to materially affect, its financial reporting.

As discussed above, the inherent limitations in all control systems are such that they can provide only reasonable, not absolute, assurance that all control issues and instances of fraud or error, if any, have been detected. Therefore, no matter how well designed, ICFR has inherent limitations and can provide only reasonable assurance with respect to financial statement preparation and may not prevent and detect all misstatements.

As at December 31, 2015, Orbite’s CEO and CFO evaluated the effectiveness of the Company’s DC&P and ICFR and concluded that the Company’s DC&P and ICFR were effective.

As at December 31, 2015, Orbite’s CEO and CFO have designed Disclosure Controls, or caused it to be designed under their supervision, to provide reasonable assurance that material information relating to the Company is made known to them by others during the period and information required to be disclosed by the Company in its interim filings or other reports filed by it under securities legislation is recorded and reported with the time periods specified in securities legislation. The CEO and CFO also designed ICFR, or caused it to be designed under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

There have been no changes to the ICFR that had occurred during the quarter ended December 31, 2015, which materially affected, or are reasonably likely to materially affect, the Company’s ICFR.

Orbite continues to review and document its DC&P and ICFR, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that systems evolve with the business.