



**ORBITE TECHNOLOGIES INC.**  
*(Formerly known as Orbite Aluminae Inc.)*

**MANAGEMENT'S DISCUSSION AND ANALYSIS** – For the first quarter ended March 31, 2016

This Management's Discussion and Analysis ("MD&A") is current to May 12, 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 condensed interim financial statements and accompanying notes for the quarter ended March 31, 2016. The Company's condensed interim financial statements were approved and authorized for issuance by Orbite's Audit Committee and Board of Directors, and have been prepared in accordance with IAS 34, *Interim Financial Reporting* 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, construction and commissioning cost overruns, delays in start of commercial production, financing requirements, contractual obligations pursuant to our secured debt facilities, 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, requiring additional financing, increases in tax or royalty rates or adoption of new interpretations related thereto, and other risks described in Orbite's Management Discussion & Analysis and our Annual Information Form for the year ended December 31, 2015 and filed on March 30, 2016 and available on [www.sedar.com](http://www.sedar.com) or on our website [www.orbitetech.com](http://www.orbitetech.com) 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.

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 “Industrial-Technology” listing category 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 symbol 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. The Company 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.

## RECENT DEVELOPMENTS

The following is a description of the general developments of the Company for the quarter ended March 31, 2016.

- On January 6, 2016, Orbite announced it had 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 were 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 could 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 occurred on 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 had to 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 would push back the start of commercial production into Q2 of 2016 (now Q3 of 2016) instead of Q1 as previously contemplated. The Company's then current financial resources were insufficient to cover such additional construction costs, and the Company was exploring financing alternatives, such as leveraging its estimated \$6.5 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 slowed down most 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.

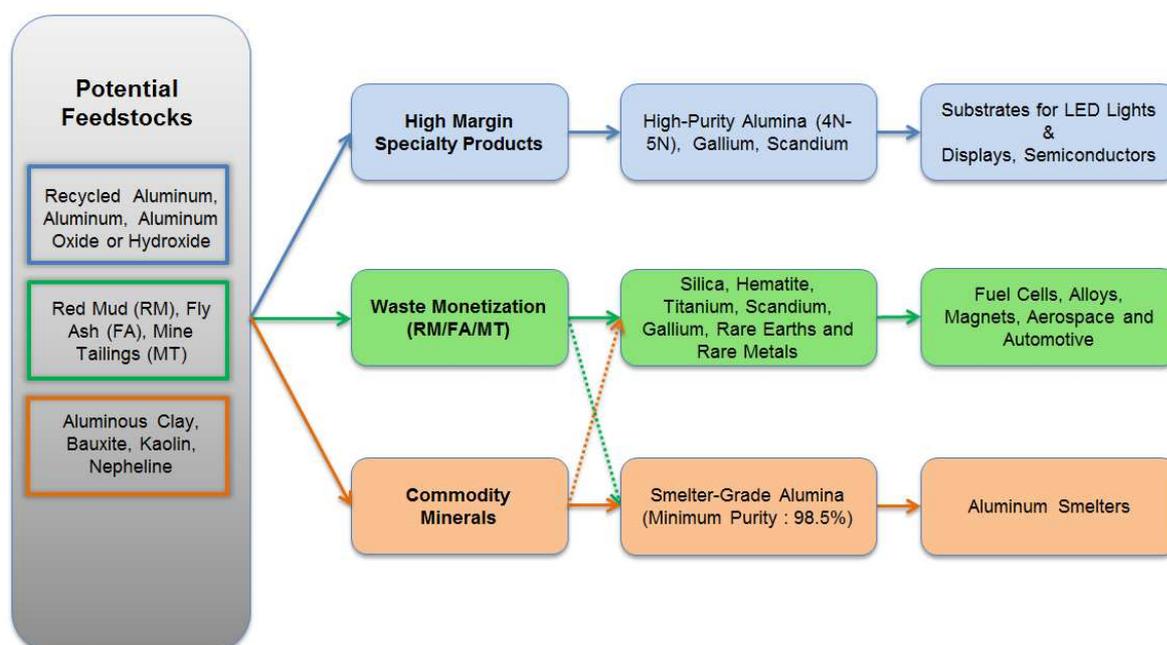
The following is a description of the general developments of the Company subsequent to the financial quarter ended March 31, 2016:

- On April 27, 2016 the Company announced that it had entered into a letter of intent with Investissement Québec, acting as mandatory of the Government of Québec, whereby Investissement Québec agreed to provide the Company with an aggregate financing of \$15 million (the "Financing"). The Financing is comprised of the purchase of 10% convertible non-secured debentures (the "Debentures") in the principal amount of \$5 million, the purchase of shares of the Company in the amount of \$5 million, together with the grant of a \$4.9 million bridge loan secured by the Company's 2016 refundable investment tax credits ("ITC"). Each Debenture will consist of \$1,000 principal amount of convertible unsecured debentures (the "Debentures") of the Company, which will mature five years from the closing date and will bear interest at a rate of 10% per annum payable monthly. The interest accrued during the first 2 years will be capitalized and payable in cash at the maturity date of the Debenture or convertible into shares at the then market price, at the sole option of the holder. Each Debenture (capital only) will be convertible, at the option of the holder at any time prior to the maturity date, into shares of the Company at a price of \$0.241 per share. The equity portion of the Financing is expected to be comprised of the purchase of 20,746,888 shares of Orbite at a price of \$0.241 per share, for total gross proceeds of \$5 million. The \$4.9 million bridge loan will bear interest at a rate of 3.5% over the prevailing prime lending rate, which currently stands at 2.7%, payable monthly, collateralized against the Company's ITC receivables for the 2016 financial year and repayable upon receipt by the Company of ITC payments for the 2016 financial year from tax authorities, but in no event later than July 23, 2018. As part of the Financing, the Company agreed to amend the terms of the 17,857,143 outstanding warrants issued to Ressources Québec inc., a subsidiary of Investissement Québec, in May 2014 as part of a private placement of 35,714,286 units, each comprised of one share and one-half of a warrant. The warrants will now be exercisable into shares of the Company at a price of \$0.241 per share (instead of \$0.33) and will expire on May 2, 2019 (instead of May 27, 2017).

- On May 5, 2016, the Company announced that, further to its press release issued on April 27, 2016, Investissement Québec concluded with Orbite a \$4.9 million bridge loan collateralized against the Company's investment tax credits receivable ("ITC") for the 2016 financial year expected to total \$6.5 million. A first installment of \$2.3 million was received, while the balance of the loan will be disbursed as the capital expenditures underlying the ITCs are expended by the Company. The bridge loan bears interest at a rate of 3.5% over the prevailing prime lending rate payable monthly, is collateralized against the Company's ITC receivables for the 2016 financial year and is repayable upon receipt by the Company of the 2016 ITC payments from tax authorities, but not later than July 23, 2018. The loan is also subject to other customary terms and conditions.
- On May 6, 2016, the Company announced that it completed a first tranche of a non-brokered equity financing in the amount of \$1,027,850 at a price of \$0.241 per share. The financing was completed on a private placement basis with arm's length investors on the same terms as, and incremental to the anticipated \$5 million equity financing by Investissement Québec announced on April 27, 2016.
- On May 11, 2016 Orbite announced a \$3.2 million advance payment from Revenu Québec for its 2014 ITCs. This amount represents 80% of the claimed amount and the remaining 20% is expected to be paid once the Audit is completed. The sums received were used to pay down a portion of the company's credit facility and term loan A on a prorated basis.
- On May 12, 2016, Orbite announced the appointment of Charles Taschereau as Vice-President and Chief Operating Officer (COO) of the Company, effective June 6, 2016.

## 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 third 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 Q3 2016. Even though the plant is not currently operational commercially, sections of the plant are operated on an intermittent basis in order to produce samples for customer qualification programs.

### Q1 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 third 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 March 31, 2016, the Company had incurred external capital costs of approximately \$48.6 million and the Company estimates that total external capital costs for completion of the HPA Plant will be \$56.2 million in the aggregate.

#### *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. 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 slowed down most 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.

Notwithstanding the foregoing, and before the construction suspension, the Company did complete certain construction and commissioning milestones during the quarter, namely:

- the installation of the air, steam, and process piping and utilities around the calcination system, delayed by the installation of the withheld equipment, is now complete.
- Cold fluidization testing (air only) using SGA in the decomposer is complete and the start-up of the decomposer acid regeneration system with water circulation has also been completed. Both systems responded in line with expectations and design parameters.
- cold fluidization tests (air only) using SGA in the calciner were initiated during the quarter, together with the start-up of the calciner acid regeneration system with water circulation to capture any solids carry-over and to mimic normal operating conditions.

#### **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, subject to raising adequate financing. After such work is completed, the Company will be able to more accurately estimate the costs and time involved in the HPA 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 2017, subject to raising adequate financing. 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 and into 2018, 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 near the end of 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.

### ***Agreements***

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

### ***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 May 2, 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 1.3724 CA\$/USD which is the average rate of the 90-day period from January 1, 2016 to March 31, 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
May 2, 2016 <sup>(1)</sup>	\$305	\$85	\$44	\$576	\$280	\$164	\$230	\$481	\$316	\$687	46%	2.2	\$2,233

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\$222/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\$55.52-62% Fe (www.indexmundi.com-last available). Our Fe<sub>2</sub>O<sub>3</sub> is 99.5% pure and therefore does contain 69.55% of Fe. US\$55.52 X 69.55% / 62% = US\$62.28 that was used in the NPV calculation. Silica: The recent silica prices show an average of US\$32 per tonne (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). 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). Sc<sub>2</sub>O<sub>3</sub> prices range from \$3,000/kg to \$5,000/kg based on publicly available information published in the last 12 months, consequently, a conservative price of US\$3,000/kg was used. The average exchange rate from January 1, 2016 to March 31, 2016 (1.3724 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>5</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 May 2, 2016, the following average prices (USD/kg - FOB China) were extracted from Metal Pages web site (www.metal-pages.com): Ga (as metal)= \$128.18, Y<sub>2</sub>O<sub>3</sub>= \$4.15, La<sub>2</sub>O<sub>3</sub>= \$1.95, CeO<sub>2</sub>= \$1.83, Pr<sub>5</sub>O<sub>11</sub>= \$53.00, Nd<sub>2</sub>O<sub>3</sub>= \$40.00, Sm<sub>2</sub>O<sub>3</sub>= \$1.98, Eu<sub>2</sub>O<sub>3</sub>= \$88.1, Gd<sub>2</sub>O<sub>3</sub>= \$46.50, Tb<sub>2</sub>O<sub>3</sub>= \$400.29, Dy<sub>2</sub>O<sub>3</sub>= \$215.12. A price of \$3,000/kg was used for the Sc<sub>2</sub>O<sub>3</sub>. The average exchange rate from January 1, 2016 to March 31, 2016 (1.3724 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.

However, as of the date of this MD&A, Orbite owns 124 mineral claims covering approximately 703.8km<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 filed on [www.sedar.com](http://www.sedar.com) on 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 MAY 12, 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.

On April 7, 2016, all of the remaining 2015 convertible debentures were converted into shares.

As of May 12, 2016, the Company had 418,399,136 Class A Shares issued and outstanding. The Company also had 93,248,670 Share Purchase Warrants exercisable at a weighted average price of \$0.65 and expiring between December 2016 and February 2019. The Company also had 19,207,750 Common Share Purchase Options at a weighted average price of \$0.67. The Company could issue a further 4,365,000 Common Shares if the February 2016 remaining Debentures were fully converted at the option of the holders.

Outstanding Class A Shares	418,399,136
Share purchase warrants	93,248,670
Share options	19,207,750
Convertible debentures (February 2016) <sup>(1)</sup>	4,365,000
<b>Fully Diluted</b>	<b>535,220,556</b>

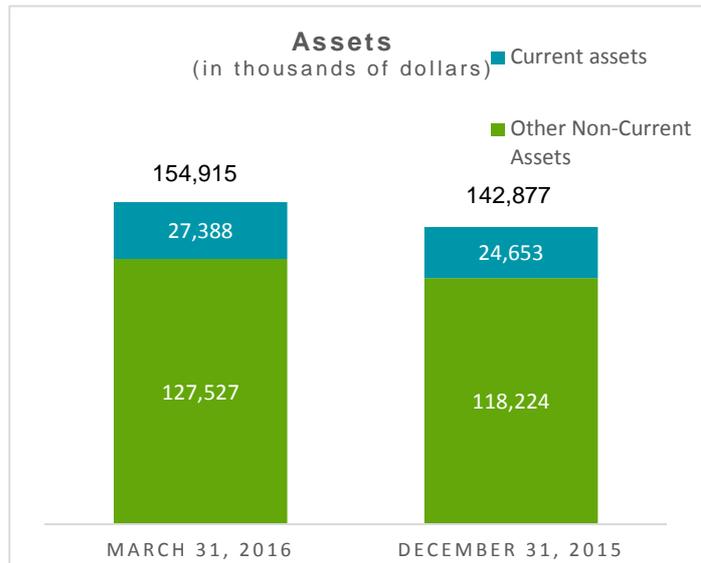
<sup>(1)</sup> Assuming a conversion price of \$0.40, not including the additional shares to be issued for the make-whole amount.

## FINANCIAL CONDITION

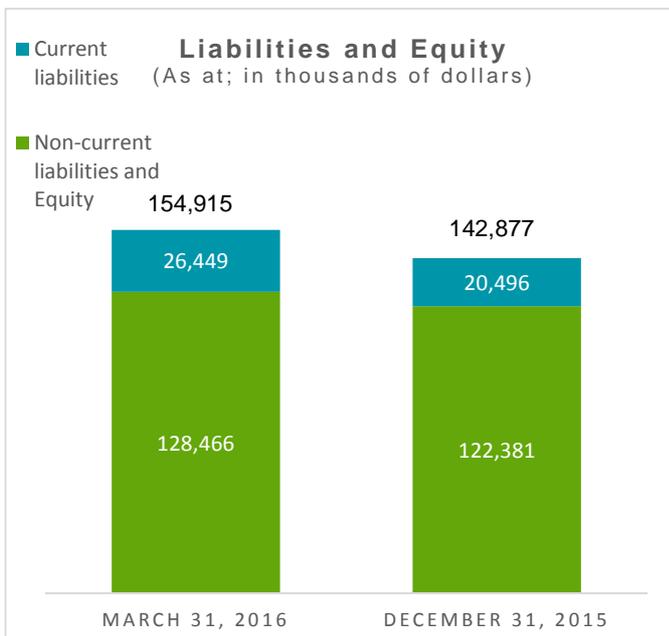
During the first quarter of 2016, cash and short-term investments remained stable compared to December 31, 2015. In February 2016, Orbite completed a \$9.5 million financing from the issuance of convertible debentures (“2016 Convertible Debentures”), which was offset by the continued investment in the construction of the HPA plant, research and development, general administration and HPA plant operating expenses.

Total assets increased by \$12 million in the quarter, mainly due to:

- a \$3.4 million increase in Investment tax credits (“ITC”) and other government assistance receivable presented in current assets and related to the recognition of ITC receivables on the equipment purchased for manufacturing and processing in the Gaspé region.
- a \$9.2 million increase in property, plant and equipment (“PP&E”), mainly attributable to investment in the HPA plant (which includes capitalized interest of \$0.7 million), partially offset by the \$3.4 million of ITCs accrued during the quarter.



Total Liabilities and Equity increased by \$12 million during the quarter and are mainly due to:



- a \$5 million increase in accounts payable and accrued liabilities due to the ramp up in the construction of the HPA plant.
- a \$0.6 million increase in long-term debt (including short-term portion) and convertible debentures mainly due to the issuance of the 2016 Convertible Debentures (see note 5 of the condensed interim financial statements) and the accretion of interest on the long-term debt, partially offset by the exercise of the conversion option.
- a \$7.9 million increase in share capital and warrants due to the issuance of common shares as a result of the conversion of the 2016 Convertible Debentures and the exercise of warrants.

## RESULTS OF OPERATIONS

### Condensed Interim Statement of Comprehensive Loss

(in thousands of dollars)	Three months ended March 31,		2016 vs 2015 Variance
	2016	2015	\$
<b>Expenses</b>			
Research and development charges*	(a) \$ 460	\$ 383	\$ 77
General and administrative charges	(b) 1,546	1,207	339
HPA plant operations	(c) 1,128	1,057	71
Other income	(d) (500)	(203)	(297)
Loss before net finance expense (income)	2,634	2,444	190
Net finance expense (income)	(e) (946)	242	(1,188)
Net loss and comprehensive loss	\$ 1,688	\$ 2,686	\$ (998)

\*Net of investment tax credits and other governmental assistance

#### Revenues

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

#### Expenses

- (a) The increase in Research and Development charges during the first quarter of 2016 is due mainly to:
- an increase in salaries, consulting fees and lab consumables, partially offset by:
  - a decrease in repairs and maintenance and lab equipment supplies.
- (b) The increase in General and Administrative charges during the first of quarter 2016 is due mainly to:
- an increase in share-based payments (consulting fees), salaries, professional and recruiting fees.
- (c) The increase HPA plant operations during the first quarter of 2016 is due mainly to:
- an increase in salaries and in headcount, partially offset by:
  - a decrease in consulting fees.
- (d) The increase in Other Income during the first quarter of 2016 is due to proceeds received from the insurance claim for the 2014 incident at the HPA plant.

#### Net finance expense (income)

- (e) The net finance expense (income) decrease during the first quarter of 2016 is due mainly to:
- a positive effect of the changes in the fair value on derivative financial instruments and on changes in foreign exchange, partially offset by:
  - lower interest received from previous year's ITCs and higher transaction costs related to the issuance of the 2016 Convertible Debentures.

### Share-based payments

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

(in thousands of dollars)	Three months ended March 31,		2016 vs 2015 variance
	2016	2015	\$
Research and development	\$ 20	\$ 16	\$ 4
General and administration	(a) 342	157	185
HPA plant operations	28	2	26
Recognized in comprehensive loss	390	175	215
Prepaid expenses and others	(a) (225)	-	(225)
Capitalized in property, plant and equipment	(4)	6	(10)
	\$ 161	\$ 181	\$ (20)

The Company has a common share purchase option plan (the "Option Plan") for its directors, officers and employees. Share-based payments recognized in comprehensive loss, which are non-cash in nature, increased by \$215,000 during the first three months of 2016 compared to the same period in 2015. The increase is mainly due to stock options issued in 2015 for advisory services recognized in general and administration during the first quarter of 2016.

### CASH FLOWS

The following table summarizes Company cash flow activities.

(in thousands of dollars)	Three months ended March 31,		2016 vs 2015 variance
	2016	2015	\$
Cash flows			
Operations	(a) \$ (2,067)	\$ (2,248)	\$ 181
Non-cash working capital items	(b) 2,455	857	1,598
Interest received	1	152	(151)
Interest paid	(435)	(533)	98
Operating activities	(46)	(1,772)	1,726
Financing activities	(c) 6,466	3,024	3,442
Investing activities	(d) (6,414)	(2,398)	(4,016)
Net change in cash	6	(1,146)	1,152
Cash, beginning of period	1,723	2,978	(1,255)
Cash, end of period	\$ 1,729	\$ 1,832	\$ (103)

### *Operating Activities*

- (a) The decrease in cash flows used for operations during the first quarter of 2016, which is cash flows used in operating activities adjusted for certain non-cash working capital items and net interest payments, is mainly due to:
- an increase in other income, partially offset by:
  - an increase in general and administrative charges, research and development charges and HPA plant operations.
- (b) The increase in non-cash working capital items during the first quarter of 2016 is mainly due to:
- an increase in accounts payable and accrued liabilities and a decrease in sales taxes and other receivables.

### *Financing Activities*

- (c) The increase in cash flows from financing activities during the first quarter of 2016 is mainly due to:
- the net proceeds received from the issuance of the 2016 Convertible Debentures and the proceeds from the exercise of warrants, partially offset by:
  - less proceeds received from short-term debt from Investissement Québec.

### *Investing Activities*

- (d) The increase in cash flows used for investing activities during the first quarter of 2016 is mainly due to:
- higher investment in the HPA plant.

## **LIQUIDITY AND CAPITAL RESOURCES**

The Company is a development stage company that has not generated any revenues or significant cash flows from its HPA plant, which is currently under construction. The Company's source of funding has primarily been from the sale of equity and debt securities, government grants and to a lesser extent, earning interest income, which is highly dependent on the cash balances and prevailing interest rates. The Company has limited financial resources, has no recurring revenues and continues to rely on the issuance of shares, debt or other sources of financing to fund its overhead, HPA plant construction, commissioning and ongoing operations and to advance its development-stage projects.

### *Convertible debentures*

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. 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.

### *Short term loan*

On April 27, 2016, Orbite entered into an agreement with Investissement Québec to obtain a \$4.9 million loan and the Company received on May 4, 2016 a first installment of \$2.3 million. The loan is repayable when the Company receives the funds from the present and future receivables secured against this loan as described below, or at the latest by July 23, 2018. It carries an interest rate of 3.5% over the prevailing prime lending rate, which at closing was standing at 2.7%. The loan is subject to certain reporting and financial customary terms and conditions including maintaining a minimum working capital ratio until repayment of the loan.

The loan is collateralized against the Investment tax credit ("ITC") receivables for the 2016 financial year and is repayable upon receipt by the Company of the 2016 ITC payments from tax authorities, but not later than July 23, 2018. The loan is also subject to other customary terms and conditions.

### *Letter of intent with Investissement Québec*

On April 27, 2016, Orbite announced that it had entered into a letter of intent with Investissement Québec, acting as mandatory of the Government of Québec. The Financing is comprised of the purchase of 5,000 units of 10% convertible non-secured debentures (the "Debentures") in the principal amount of \$5 million and the purchase of Class A shares of the Company in the amount of \$5 million.

Each Debenture consists of \$1,000 principal amount of convertible unsecured debentures of the Company, which will mature five years from the closing date and will bear interest at a rate of 10% per annum payable monthly. The interest accrued during the first 2 years will be capitalized and payable in cash at the maturity date of the Debentures or convertible into shares at the then market price, at the sole option of the holder. Each Debenture (capital only) will be convertible, at the option of the holder at any time prior to the maturity date, into Class A shares of the Company at a price of \$0.241 per share. The equity portion of the Financing will be comprised of the purchase of 20,746,888 class A shares of Orbite at a price of \$0.241 per share, for total gross proceeds of \$5 million.

As part of the Financing, the Company has agreed to amend the terms of the 17,857,143 outstanding warrants issued to Ressources Québec inc., a subsidiary of Investissement Québec, in May 2014 as part of a private placement. The warrants will now be exercisable into Class A shares of the Company at a price of \$0.241 per share (instead of \$0.33) and will expire on May 2, 2019 (instead of May 27, 2017) which could potentially generate an additional \$4.3 million.

### *Non-brokered financing*

On May 6, 2016, Orbite announced that it had completed a non-brokered financing in the amount of \$1,027,850 at a price of \$0.241 per share. The financing was completed on a private placement basis, on the same terms as the anticipated \$5 million equity financing by Investissement Québec. The shares underlying the financing were issued without payment of a commission and are subject to a hold period of four months and one day.

### *ITC 2014*

On May 11, 2016 Orbite announced a \$3.2 million advance payment from Revenu Québec for its 2014 ITCs. This amount represents 80% of the claimed amount and the remaining 20% will be paid once the audit is completed. The sums received were used to pay down a portion of the company credit facility and term loan A on a prorated basis.

As at March 31, 2016, the Company had aggregate cash and short-term investments balance of \$2.6 million, and positive working capital (current assets less current liabilities) of \$0.9 million. Subsequent to March 31, 2016, the Company has raised capital and secured a short term loan, strengthening its working capital position. Following the April 27, May 5 and May 6, 2016 announcements, the Company has, on a pro-forma

basis, a cash and short-term investments balance of \$18.5 million and pro-forma working capital of \$11.9 million.

The Company has no other committed sources of future financing as of the date of this MD&A other than the ones 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 third quarter of 2016. 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. Once Orbite reaches commercial production of the HPA plant and has sales, it can obtain further financing through the MidCap revolving facility.

The condensed interim 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 exploration and development of its mineral property interests, 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 sources 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 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, as it has in the past obtained 2 waivers from its lender.

If the going concern assumption were not appropriate for these condensed interim 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.

### **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 condensed interim financial condition or future results of the Company.

### **Contractual Obligations**

As at March 31, 2016, the total purchase commitment for capital expenditures at the HPA project relating to equipment amounted to approximately \$0.7 million.

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 financing as described in the liquidity and capital section.

The following table presents the contractual maturities of the financial liabilities and commitments as of March 31, 2016:

(in thousands of dollars)

	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	\$ 13,039	\$ 13,039	\$ 13,039	\$ -	\$ -	\$ -
Short-term loan	11,627	12,865	5,029	7,836	-	-
Derivative financial instrument <sup>a)</sup>	174	-	-	-	-	-
Convertible debentures <sup>b)</sup>	1,436	1,988	96	193	1,699	-
Long-term debt	16,260	21,254	1,140	10,186	5,408	4,520
Operating leases	-	369	369	-	-	-
Purchase obligations	-	735	735	-	-	-
	\$ 42,536	\$ 50,250	\$ 20,408	\$ 18,215	\$ 7,108	\$ 4,520

<sup>a)</sup> The embedded derivative has no outflows since it is included in the 2015 and 2016 convertible debentures.

<sup>b)</sup> 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 quarter ended March 31, 2016, the Company incurred \$ 137,322 (March 31, 2015 - \$118,155) from a legal firm in which a director of the Company is a partner. 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:

(in thousands of dollars, unless otherwise indicated)

Quarter ended	Net loss and comprehensive loss (\$)	Quarter to quarter variance (\$)	Net loss per share (\$)
March 31, 2016	1,688	(5,122) (a)	0.00
December 31, 2015	6,810	4,677 (b)	0.01
September 30, 2015	2,133	(1,607) (c)	0.01
June 30, 2015	3,740	1,054 (d)	0.01
March 31, 2015	2,686	(788) (e)	0.01
December 31, 2014	3,474	3,245 (f)	0.01
September 30, 2014	229	(4,056) (g)	0.00
June 30, 2014	4,285	-	0.02

- (a) the decrease in net loss is principally due to a positive effect of the changes in fair value on derivative financial instruments and on changes in foreign exchange. Also the Q4 2015 Net loss and comprehensive loss includes a loss recognized on the redemption of all the outstanding 2012 debentures recognized in Q4, 2015.
- (b) the increase in net loss is principally due to the loss on the redemption of all outstanding 2012 debentures as well as an increase in general and administrative charges and the HPA Plant operations.
- (c) the decrease in net loss is principally due to a decrease in general and administration, research and development and transaction costs.
- (d) the net loss increase 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.
- (e) the decrease in net loss is mainly due to a decrease in research and development, general and administrative, and HPA plant operations as well as the absence of the 2014 write-off following the redesign and other expenses pertaining to the flow-through shares.
- (f) the net loss increase 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.
- (g) the decrease in 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.

#### *Fair Value of financial instruments*

The nature and extent of risk arising from financial instruments are described in *Note 15 – Financial instruments* of our 2015 annual financial statements available on [www.sedar.com](http://www.sedar.com) or on our website [www.orbitetech.com](http://www.orbitetech.com).

During the first quarter of 2016, there was no material change to the nature of risks arising from financial instruments or classification of financial instruments. Furthermore, there was no change in the methodology used to determine the fair value of the financial instruments that are measured at fair value on our condensed interim statement of financial position.

#### *Risk and Uncertainties*

For a detailed description of risks and uncertainties associated with the Company, its business and operations, refer to the “Risk and Uncertainties” section of Orbite’s Management Discussion & Analysis and our Annual Information Form for the year ended December 31, 2015 and filed on March 30, 2016 and available on [www.sedar.com](http://www.sedar.com) or on our website [www.orbitetech.com](http://www.orbitetech.com).

Factors of uncertainty and risks that might result include the risks related to the need to raise capital to continue our growth, we may be subject to cost overruns, delays, labor shortages, labor unrest and other construction risks, the Company is dependent on a single principal asset, negative cash flows from operations, We may be unable to retain key employees, management personnel or other employees, if our competitors misappropriate unpatented proprietary know-how and our trade secrets, it may have a material adverse effect on our business, new markets, Alumina, rare earth and metal oxide prices and PEA disclosure, capital cost estimates, production, exploration and mining risks, environmental and other regulatory requirements, mineral resource estimates, title to properties, industry conditions, competition, permits and licenses, absence of feasibility studies, access to raw materials and inputs for production, joint ventures, development goals and time frames, changes to royalty regime, our business is subject to risks that may not be covered by insurance, litigation, risks related to our common shares, additional issuances of equity securities may result in dilution to our existing shareholders, our common shares are classified as a “penny stock” under SEC Rules, which limits the market for our common shares, 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, a decline in the price of our common shares could affect our ability to raise further working capital and adversely impact our operations, listing of our common shares and other risks stated in our continuous disclosure documents.

### **CRITICAL ACCOUNTING ESTIMATES**

The preparation of our financial statements requires management to make judgements, estimates, and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the financial statements and reported amount of income, and expenses during the reporting period. 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 judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances available at the time estimates are made.

Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future period affected. There have been no changes in the significant judgements and estimates made by the management. The estimates and assumptions that have a significant risk of causing material adjustments to our financial statements were disclosed in *Note 3 – Significant accounting policies* to our 2015 annual audited financial statements available on [www.sedar.com](http://www.sedar.com) or on our website [www.orbitetech.com](http://www.orbitetech.com) and they remain unchanged for the first quarter of 2016.

### **SIGNIFICANT ACCOUNTING POLICIES**

The condensed interim financial statements have been prepared in accordance with accounting policies which are consistent with those of the Company's annual financial statements for the year ended December 31, 2015.

*Standards, amendments and interpretation not yet in effect*

*IFRS 15 Revenue from Contracts with Customers ("IFRS 15")*

IFRS 15 contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The new standard is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Company is currently assessing the impact of IFRS 15 on its financial statements and whether to early adopt.

### **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 March 31, 2016, 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 March 31, 2016, 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.