

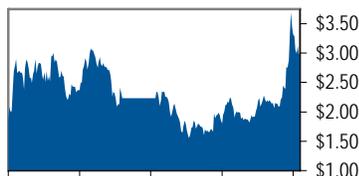


ORBITE ALUMINAE INC. – SPEC. BUY

ORT-TSX	\$2.99
TARGET:	\$9.00
PROJ. RETURN:	201%
VALUATION:	1x NAV

Share Data

Basic Shares O/S (mm)	168.7
Fully Diluted (mm)	199.5
Market Cap (basic) (\$mm)	504.4
Enterprise Value (\$mm)	446.6
Net Debt (\$mm)	-57.9
Dividend	0.0
Yield	N/A
Next Reporting Date	November



Oct-11 Jan-12 Mar-12 Jun-12 Sep-12

Short-term Technical Target

\$3.80, next resistance. ORT broke out in early September on strong volume. Further resistance at \$4.50.

Corporate Profile

Orbite Aluminae Inc. is hybrid resource and processing technology company engaged in commercializing its patented technology to extract metallurgical alumina, high-purity alumina and other by-products from its Gaspe region clay stone deposit.

Upcoming Events

H2/2012: Definitive RUSAL agreement.

End of 2012: Feasibility Study (FS) on Smelter Grade Alumina (SGA) plant.

Q1/13: Start of commercial operations of

SGA Plant Design Completed & Improved

EVENT – Major Milestone Achieved in SGA Plant Design

Today, Orbite has announced that it has completed the final design of its smelter-grade alumina (SGA) plant. Moreover, design of the SGA plant has been modified with notable improvements to the alumina calcination sub-process. Incorporating these improvements along with other best practices increases overall efficiency.

IMPACT – Further De-Risking the Expansion Plan

Realized efficiency gains are of major importance: Because the alumina calcination sub-process represents 55% of fossil fuel costs, and with fossil fuel costs representing approximately 60% of overall SGA operating costs, any advancement that results in a material reduction of energy consumption represents a large efficiency gain.

Quantifying the improvement: The result of the modification yields an impressive reduction in the consumption of fossil fuels by at least 30% and of water by at least 60%. Together, these improvements are estimated to result in an operating expense reduction by 20% and reduction to the requirement of capital investment, an amount that will be determined at a later time. Our financial modeling indicates this operational gain has the potential to increase the net present value of one SGA plant by 30%.

The improvements were achieved by simplifying and integrating sub-processes while reducing overall dependence on fossil fuels: Orbite developed a new proprietary calcination technique using circulating fluid beds that operate at lower temperatures and enables the heat generated from calcination to be reused in the hydrochloric acid regeneration system, thereby, reducing fossil fuel consumption by at least 30%. Water consumption has also been reduced by 60% resulting in lower volumes of acid solution.

Impact on Timing – delay is worth it considering efficiencies gained: The SGA plant Feasibility Study, which has now entered the detailed engineering and sub-system integration phase, will be modified to incorporate the final design of the SGA plant, and is now anticipated to be completed during the first half of 2013. Construction of the first phase of the first SGA plant is still anticipated to begin in 2013 with completion by late 2014.

ACTION – Orbite Continues to be Materially Undervalued

We re-iterate our \$9.00 target price on Orbite. Today's news provides further indication that the Company is achieving progress in its quest towards emergence as a low-cost alumina producer. It is also a sign of further process de-risking.

FYE Dec 31		2011A	Q1/12A	Q2/12A	Q3/12E	Q4/12E	2012E	Q1/13E	Q2/13E	Q3/13E	Q4/13E	2013E
Met. Alumina Sales	\$ million	-	-	-	-	-	-	-	-	-	-	N/A
HP Alumina Sales	\$ million	-	-	-	-	-	-	7.5	7.5	15.0	15.0	45
EPS	\$/sh	(\$0.08)	(\$0.02)	(\$0.03)	(\$0.01)	(\$0.01)	(\$0.07)	\$0.00	\$0.00	\$0.02	\$0.03	\$0.06
P/EPS	multiple	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	52
CFPS		\$0.04	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.04)	\$0.00	\$0.01	\$0.03	\$0.03	\$0.07
P/CFPS		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	48

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ORBITE ACHIEVES MILESTONE WITH COMPLETION OF SGA DESIGN

Final design of SGA plant has been completed, with efficiency improvements: Today, Orbite has announced that it has completed the final design of its smelter-grade alumina (SGA) plant. Moreover, design of the SGA plant has been modified with notable improvements to the alumina calcination sub-process. Incorporating these improvements along with other best practices increases overall efficiency.

Realized efficiency gains are of major importance: Because the alumina calcination sub-process represents 55% of fossil fuel costs, and with fossil fuel costs representing approximately 60% of overall SGA operating costs, any advancement that results in a material reduction of fuel consumption represents a large efficiency opportunity.

Quantifying the results: The result of the modification yields an impressive reduction in the consumption of fossil fuels by at least 30% and of water by at least 60%. *Together, these improvements are estimated to result in an operating expense reduction by 20%*, and reduction to the requirement of capital investment, an amount that will be determined at a later time.

With this operational improvement, Orbite may have the ability to emerge from the top 5 percentile of lowest operating costs among SGA producers, to the outright low cost leader, and achieve this with an improved environmental footprint.

The improvements were achieved by simplifying and integrating sub-processes while reducing overall dependence on fossil fuels: Orbite developed a new proprietary calcination technique using circulating fluid beds that operate at lower temperatures and enables the heat generated from calcination to be reused in the hydrochloric acid regeneration system, thereby, reducing fossil fuel consumption by at least 30%.

Water consumption has been reduced by 60% resulting in lower volumes of acid solution, these lower volumes automatically reduces the number of separation/crystallization and acid regeneration units required as well as the number of units required for the individual extraction of by-products.

By utilizing circulating fluid beds, the proprietary calcination technique will differ completely from the rest of the alumina industry and should enable Orbite SGA plants superior efficiency and cost structure.

M&K provides Independent verification and provides reassurance in execution: M&K is a highly regarded chemical engineering firm based in Granite City, Illinois. The engineering company has decades of experience in areas such as engineering design, process design, project management, operational assistance and procurement. With M&K's major strength the integration of multiple sub-processes to achieve a successful flow-sheet, their involvement with Orbite's SGA design provides a sense of comfort. M&K also points out in the press release that: "all of the equipment, products and by-products under consideration by Orbite are within the realm and expertise of our company."

M&K also provides independent validation of the percentage efficiency gains discussed above. Moreover, M&K in the press release clearly states that Orbite's process represents a 'viable alternative to the Bayer process.'

Impact on Timing - delay is worth it considering efficiencies gained: The SGA plant Feasibility Study, which has now entered the detailed engineering and sub-system integration phase, will be modified to incorporate the final design of the SGA plant, and is now anticipated to be completed during the first half of 2013. Construction of the first phase of the first SGA plant is still anticipated to begin in 2013 with completion by late 2014.

With the improvement in efficiencies having such a material reduction in operating costs, we regard the revised timeline of feasibility study completion (previously 'end of 2012') as a prudent course for Orbite to take. With certain junior energy companies also in the midst of proving up potential fossil fuel energy resources in the Gaspé, the Feasibility Study's new timeline, with any luck, may result in the identification of an ideal energy source within close proximity to Grand Vallée.

Potential Valuation Impact: Despite this process design improvement having the potential to provide material economic gains over the metrics provided in Orbite's PEA, we are leaving our NAV based \$9.00 price target unchanged. However, incorporating the 20% reduction to SGA operating costs, we calculate, could increase the NAV of one SGA plant by approximately 30%. While our base case approach may be conservative by only including the hematite byproduct revenues, we remind our investors that including all potential byproduct revenue streams increases the NAV to \$15/sh. And again, this is with just one SGA plant. In the scenario where we include all byproduct revenue streams in the model, and incorporate the 20% operating cost efficiencies discussed in this note, we calculate a scenario where the overall NAV increases to over \$20/sh. Again, this includes just one HPA and one SGA plant.

RISKS TO TARGET

The main risks include commodity price risk, technology risk, commercialization risk, and resource development and mining risks.

RELEVANT DISCLOSURES APPLICABLE TO: ORBITE ALUMINAE INC.

1. On a recent analyst tour, Matt Gowing visited the operations of Orbite Aluminae Inc. Transportation costs related to the visit were paid in part the by issuer.
2. Within the last 3 years, Mackie Research Capital Corporation has managed or co-managed an offering of securities by the subject issuer.
3. Within the last 3 years, Mackie Research Capital Corporation has received compensation for investment banking and related services from the subject issuer.

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