ALTAIR NANOTECHNOLOGIES INC
Form 10-K
March 30, 2012

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2011

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM ________ TO __________

ALTAIR NANOTECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Canada	1-12497	33-1084375
(State or other jurisdiction of incorporation)	(Commission File No.)	(IRS Employer Identification No.)

204 Edison Way
Reno, Nevada 89502-2306

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (775) 856-2500

Securities registered pursuant to Section 12(b) of the Act:

Common Shares, no par value	NASDAQ Capital Market
(Title of Class)	(Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES [ ] NO [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES [ ] NO [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES [X] NO [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES [X] NO [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Report or any amendment to this Report. [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "accelerated filer", "large accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

[ ] Large Accelerated Filer	[ ] Accelerated Filer
[ ] Non-accelerated Filer	[X] Smaller reporting Company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act): YES [ ] NO [X]

The aggregate market value of the common shares held by non-affiliates of the Registrant on June 30, 2011, based upon the closing stock price of the common shares on the NASDAQ Capital Market of $0.86 per share on June 30, 2011, was approximately $26.3 million. Common Shares held by each officer and director and by each other person who may be deemed to be an affiliate of the Registrant have been excluded.

As of March 30, 2012, the Registrant had 69,452,487 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement on Schedule 14A for the Registrant's 2011 Annual Meeting of Shareholders are incorporated by reference in Part III as specified.

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PART I

This Annual Report on Form 10-K for the year ended December 31, 2011 (this “Report”) contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that involve risks and uncertainties. Purchasers of any of the common shares (the “common shares”) of Altair Nanotechnologies Inc. are cautioned that our actual results will differ (and may differ significantly) from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those factors discussed herein under “Item 1A. Risk Factors” and elsewhere in this Report generally. The reader is also encouraged to review other filings made by us with the Securities and Exchange Commission (the “SEC”) describing other factors that may affect future results.

Unless the context requires otherwise, all references to “Altair,” “we,” “Altair Nanotechnologies Inc,” or the “Company” in this Report refer to Altair Nanotechnologies Inc. and all of its consolidated subsidiaries. Altair currently has one wholly owned subsidiary, Altair US Holdings, Inc., a Nevada corporation. Altair US Holdings, Inc. directly or indirectly wholly owns Altairnano, Inc., a Nevada corporation, and Mineral Recovery Systems, Inc., a Nevada corporation. AlSher Titania LLC, a Delaware limited liability company, was 70% owned by Altairnano, Inc. until we sold our interest to Sherwin-Williams on April 30, 2010. We have registered the following trademarks: Altair Nanotechnologies Inc® and Altairnano®. Any other trademarks and service marks used in this Report are the property of their respective holders.

Item 1: Business.

We are a Canadian corporation, with principal assets and operations in the United States, whose primary business is developing, manufacturing and selling nano lithium titanate batteries and battery systems. The company targets applications that effectively utilize the key attributes of our technology, including safety, long cycle life, a wide temperature operating range, high power density, and very fast charge and discharge capabilities.

During 2011, the Company focused its product development, marketing and sales and manufacturing operations in three market segments: electric grid, transportation (commercial vehicles), and industrial, as a result of market research concluding these segments offered the best fit for our technology and the most promising path for revenue growth.

In July 2011, Canon Investment Holdings, Ltd (“Canon”), through its subsidiary Energy Storage Technology (China) Group Limited (“Energy Storage China”), acquired a majority of common shares of the Company. In 2012, we plan to form one or more Wholly Foreign Owned Enterprises (“WFOE”) in China. We expect that over time a meaningful portion of our sales, and eventually our manufacturing, will originate from China. Our business plan currently provides that we will close our Reno, Nevada facility during late 2012, move our nano lithium titanate manufacturing capability to China in 2013 and consolidate our U.S. operations, in Anderson, Indiana for greater efficiency and cost reductions. This plan is conditioned upon our being able to reach agreements with local governments in China necessary for our establishment of a manufacturing presence in China. If we are unable to reach such agreements, we will re-evaluate our business plan.

Primary Products and Markets

Primary Products

We have developed, and continue to develop, through our primary materials science research, a lithium-ion battery chemistry using nanotechnologies to create materials offering unique electrochemistry properties for rechargeable batteries. We refer to this material as nano lithium titanate, and it is applied to the battery anode. Our nano lithium titanate offers 4 to 10 times greater life, an ability to rapidly discharge and charge, an ability to operate in extremely cold and hot temperatures, and a margin of safety lessening the risk of thermal runaway (a condition that can lead to lithium-ion battery fires) compared to other lithium-ion technologies. The batteries exhibit very high power levels, which are ideally suited for applications in the electric grid segment for grid stability, hybrid and all-electric vehicles, and industrial applications.

We manufacture a range of cells, modules, packs and turn-key systems for target markets including 24V, 36V, and 48V industrial and transportation systems, a configurable industrial PowerRack system, and large-scale multi-megawatt systems for the electric grid.

Target Markets

Electric Grid

Globally, electric utilities and power generation companies seek to maintain high levels of grid stability while seeking cost effective ways to accurately match electricity generation with demand. Essentially, there is no inventory of electricity; demand and generation must match. While the industry is capable of doing this from hour to hour, variations in load and demand from minute to minute cannot be accurately forecasted. When imbalances occur, the frequency (60 Hz in the U.S) can vary and must be balanced within very tight tolerances. Maintaining these tolerances is typically achieved through the use of auxiliary generators. If the load is either higher or lower than the power being generated, an auxiliary generator is either started or stopped. However, it takes these generators from generally seven to 15 minutes to ramp up to full efficient operation or to shut down. During that period, the load may change directions and the grid operator then must direct another auxiliary generator to shut down or ramp up. This is a very inefficient process with the grid operators constantly chasing a variable load. The process of managing these very short-term changes in energy demand is referred to as “frequency regulation.” The chart below depicts what a typical workday in the PJM Regional Transmission Organization that manages the electric grid in the Mid-Atlantic states region looks like and how our battery can help smooth out the fluctuations.

Utilities can address frequency regulation issues by maintaining on-line generating capacity at a level that is always higher than expected peak demand; however this can be an expensive solution, particularly where natural gas, diesel and other alternative fuels are not affordable alternatives. Most U.S. utilities are required to maintain between 1% - 1.5% of their peak load capacity to provide frequency regulation. As an example, for the PJM Regional Transmission Organization, this requirement translates into a 900 megawatt daily requirement. In many foreign countries where the electric grid is not as well developed as it is in the U.S., utilities need to reserve up to 5% or more of their capacity strictly to provide frequency regulation. The Cleantech Group estimated in a November 2010 report that the market for ancillary services is 6.5 gigawatts in the United States annually, or an estimated value in the range of $3-$10 billion depending on power prices and specific ancillary services applications. Globally, they estimated the market to be 33 gigawatts, or a dollar value of between $16 - $45 billion. While these estimates represent a “ballpark” figure and have a highly variable dollar range, the magnitude of the market is significant. To reduce the costs of providing frequency regulation, utilities and grid operators are seeking “fast response” energy storage systems. When supply exceeds demand for a short period, these systems accept a charge from the grid until operators reduce output; then when demand exceeds supply for a short period, these fast response storage systems deliver electric energy back to the grid for a short period to give operators time to reroute energy from another power generator or power-up a new power source. Our large-scale nano lithium titanate battery systems are a fast response energy storage system designed to respond in milliseconds and meet this need.

The need for a fast response energy storage technology, like our large-scale nano lithium titanate battery, is increased by the accelerated use of renewable energy sources. Photo Voltaic (PV) solar and wind power generation by nature are intermittent and unpredictable sources of energy that can fluctuate widely in a very short period of time. For example, it is not uncommon for a PV array to fluctuate +/- 50% in less than 90 seconds. With a small rooftop array, it isn't an issue, because the size of the generator is too small to matter. However, with a 50+ megawatt array, problems arise as the electric grid isn't currently built to handle this kind of a fluctuation. According to the Federal Energy Regulatory Commission, as of September 2011, twenty nine states and the District of Columbia require the integration of renewable energy sources into the power grid through legislated renewable portfolio standards as shown in the following table.

Final Target		Number	States with Renewable Mandates (RPS)
10% - 14	%	7	Iowa, Maine, Mich., N.C., Ohio, Texas, Wis.
15% - 19	%	7	Ariz., Mass., Mo., Mont., Pa., R.I., Wash.
20	%	4	D.C., Kansas, Md., N.M.
21% - 24	%	2	N.H., N.J.
25% - 29	%	6	Conn., Del., Ill., Minn., Nev., Ore
30% - 39	%	3	Calif., Colo., N.Y.
40	% +	1	Hawaii

Many of these states have established targets requiring the integration of renewable generation sources equal to or exceeding 25% of total generation within the next decade. For example, California has a mandate to generate 33% of its electricity from renewable energy sources by 2020. According to the August 2010 Long Term Procurement Plan Proceeding of the Pacific Gas and Electric Company, the 2009 California regulation requirement was 419 megawatts and the California Independent System Operator (CAISO) predicts that to meet the 33% renewable portfolio standard by 2020, California will require 1,114 megawatts of regulation. These levels are substantially higher than what is available through renewable sources today. The mandated adoption of these renewable energy sources is likely to increase the need for effective, efficient, clean energy storage technologies to provide frequency regulation services and maintain the reliability and stability of the associated electric grid systems.

Transportation (Commercial Vehicles)

Large cities, counties and transit authorities are increasingly turning to electric and hybrid electric buses to reduce pollution and reliance on diesel fuel for their transportation systems. Commercial vehicle manufacturers, including medium-duty and heavy-duty trucks, are likewise evaluating hybrid systems to improve fuel economy and in some instances run battery-only systems at low speeds. At this stage of the market development, electric and hybrid electric vehicles generally cost more than their conventional counterparts, although the upfront cost is partially offset by lower operating costs and a potentially longer operating life. Proterra LLC had one of its all-electric buses using our batteries tested at the Altoona Test Track by Penn State University and demonstrated a 17.5 to 29.5 miles per gallon (mpg) fuel equivalent vs. a normal diesel bus that achieved under 4 mpg. This difference translates into a fuel savings of about $350,000 over the life of the bus assuming a fuel cost of $3.50 per gallon. This is in addition to the savings in maintenance costs over the life of the bus, as a result of fewer mechanical systems and moving parts to maintain. We believe that cities, counties and commercial vehicle operators are willing to accept the higher upfront costs in order to benefit from the expected savings in long-term operating costs and potentially longer operating life, as well as the environmental benefits.

Electric and hybrid-electric commercial vehicles require a significant amount of power, operate throughout the day, have a long expected life and run in extreme temperature ranges. The relative strengths of our nano lithium titanate batteries, including the high levels of power, rapid charge and discharge rates, long cycle life and ability to function at temperature extremes, are particularly well suited for electric and hybrid commercial vehicles, giving us what we believe is a compelling competitive advantage in this market.

According to an October 2010 research report from the Freedonia Group Inc., the global market for buses is expanding at a 4.3% annual rate and is expected to hit 423,300 units in 2014. In a separate report published by Pike Research in November 2010, it is projected that the global demand for hybrid-electric buses will grow at a compound annual growth rate of 19.8% between 2010 and 2016. With the growing concern regarding the release of pollutants associated with burning fossil fuels, the attractiveness of all electric and hybrid electric buses is rapidly growing. Working with Proterra and other potential partners, we are attempting to establish our nano lithium titanate batteries as the power source of choice in this emerging market.

Military Uses. As a condition to close our funding transaction with Canon, we ceased all operations in the military market effective December 31, 2010. We recognized $303,000 of pass-through subcontractor revenue and cost of goods sold from Western Michigan University in 2011 for the completion of our nanosensor development contract with the U.S. Army.

Key Features of Our Nano Lithium Titanate Batteries

One of the principal advantages of our nano lithium titanate battery is its rapid charge and discharge rate. The charge rate is the rate at which a battery’s energy is replenished, and the discharge rate is the rate at which the energy stored in a battery is transferred (or, in the case of self-discharge, leaked) out. Through the optimization of materials used in our nano lithium titanate battery cells, our current cells are capable of recharge times of 10 minutes to 95% or more of initial battery capacity. The rapid recharge ability is important in our target markets of frequency regulation and mass-transit buses.

Our nano lithium titanate batteries also discharge rapidly, symmetrical with their charging ability. This balanced charge and discharge capability can be important in frequency regulation. If a battery cannot be charged at the same rate at which it discharges, then over time, with random high rate up and down regulation, a less capable battery system may ultimately be fully discharged and therefore incapable of further regulation.

Our nano lithium titanate batteries have both a longer cycle life and calendar life than commercially available rechargeable battery technologies such as conventional lithium ion, nickel-metal hydride (NiMH) batteries and nickel cadmium (NiCd) batteries. The ability of any rechargeable battery to store energy will diminish as a result of repeated charge/discharge cycles. A battery’s “cycle life” is the number of times it can be charged and discharged without a significant reduction in its energy storage capacity. Our nano lithium titanate is termed a zero strain material, meaning that the material essentially does not change shape upon the entry and exit of a lithium ion in the material. Graphite, the most common material in conventional lithium ion batteries, will expand and contract as much as 8% with each charge/discharge cycle. This constant change in volume rapidly breaks down the battery resulting in significantly shorter calendar and cycle life than with our nano lithium titanate anodes. In a January 2007 test, we completed 25,000 deep charge/discharge cycles of our innovative cells. Even after 25,000 cycles, the cells still retained over 80% of their original charge capacity. This performance represents a significant improvement over conventional batteries, which typically retain that level of charge capacity only through approximately 1,000 to 3,000 deep charge/discharge cycles.

Our nano lithium titanate also represents a breakthrough in low and high-temperature performance. Nearly 90% of room temperature charge retention is realized at -30°C from our nano lithium titanate battery cells. In contrast, common lithium ion technology possesses virtually no charging capabilities at this low temperature, and the other rechargeable battery types such as lead acid, NiMH and NiCd take 10 to 20 times longer to charge at this low temperature. This breakthrough performance at extreme temperatures is important in our target markets, in which large vehicles and large-scale fast storage batteries are expected to function in a wide range of temperature conditions. Transit buses, for example, need to function equally well in the cold New England winters and the hot summers of the Southwest.

We also believe that relative safety is one of the strengths of our nano lithium titanate batteries. Any battery cell or large battery unit with lithium ion cell technology must take into account safety considerations, the most important of which is thermal runaway. Thermal runaway is the temperature at which the battery chemistry will break down causing the battery to overheat and potentially explode or catch fire. This temperature is often referred to as the critical temperature. Critical temperature for lithium ion battery cells using conventional graphite anodes is around 130° C, a direct result of chemical reaction between the graphite and the electrolyte. With our current nano lithium titanate anode in place of graphite and an appropriate cathode material, that critical temperature will be close to 200° C, an increase in safety margin of approximately 70° C. Materials we are using in our lab operate at 250oC before the critical temperature is reached. The batteries we and our partners are developing for high power applications often consist of dozens or even thousands of battery cells working together as part of a single modular battery unit. When a large number of cells are aggregated into a single battery unit, the likelihood of, and risks associated with, thermal runaway increases. In this context, we believe that the additional temperature margin our individual battery cells experience before reaching the critical temperature makes our battery cells better suited than competing lithium ion batteries for the high-power applications we are targeting.

The current generation of batteries made with our nano lithium titanate exhibit lower energy density at room temperatures than conventional lithium ion systems. Energy density is normally described as watt-hours per kilogram or watt-hours per liter and refers to the available energy per unit weight or per unit volume. A battery with high energy density will deliver more energy per unit weight or volume than a battery with lower energy density. Our batteries made with our nano lithium titanate have energy densities, watt-hours per kilogram, that are better than lead acid, NiCd and NiMH batteries and approximately 50-70% of conventional lithium ion batteries when operated at room temperature. However, this energy density disadvantage is significantly less compared to conventional lithium ion batteries as the operating temperature moves away from room temperature, particularly to colder environments, and less significant in environments such as large vehicles and utilities in which battery volume is not a significant issue. When the end use of the battery requires constant performance across a wide range of temperatures, such as the need for a hybrid bus to function comparably in both winter and summer, our nano lithium titanate cells may be the preferred solution. Also, conventional lithium ion batteries prefer to cycle between approximately 30% and 80% state of charge to achieve optimum cycle life. As a result, they only use about 50% of their nominal available energy. Our nano lithium titanate batteries, on the other hand, are not so limited and as a result can use approximately 90% of their nominal available energy.

Sources of Supply and Raw Materials

An important consideration, as we begin to grow our revenue stream, is to ensure that we have access to the various components and raw materials we need to manufacture and assemble our various products. With a small product volume, having multiple suppliers for each component is not practical. As we anticipate larger orders, establishing multiple sources for key components is becoming much more important to us.

Two raw materials are key components in the manufacture of our nano lithium titanate powder that is the basic building block of our battery products, namely compounds of lithium and of titanium. We currently source our lithium compound from two of the largest producers in the world and do not foresee any problems in scaling up our purchases as our volume of business increases. We are also working to qualify additional sources of lithium supply. We source our titanium compound from a single provider who is a global leader in the field, and we are in the process of identifying and qualifying additional sources for this key material. At this point we are not anticipating any problems or disruptions to our supply of these raw material compounds.

As of the date hereof, we have two contract manufacturing sources for our nano lithium titanate cells. We have had quality issues with both contract manufacturers. Our nano lithium titanate battery cells are the building blocks of all of our products (other than our nano lithium titanate powder). If we continue to experience quality issues with our suppliers, we may be unable to meet our deadlines, or quality specifications, with respect to existing or future orders. This would harm our reputation and our ability to grow our business.

All of the other components and materials used in the manufacture of our nano lithium titanate battery products are readily available from multiple suppliers.

Key Business Developments in Power and Energy

Frequency Regulation. As part of a multi-year development program with AES Energy Storage, LLC ("AES"), a subsidiary of global power leader The AES Corporation, we delivered a 2 megawatt battery system, consisting of two 53-foot container-sized 1 megawatt units, to AES in late 2007. AES successfully completed testing of this 2 megawatt battery system in May 2008. The test consisted of AES connecting the battery to the electrical grid at a substation in Indiana and then performing a number of stringent tests to determine if it was capable of providing the services required. These tests were designed and overseen by KEMA, Inc., an independent outside engineering company, and demonstrated that the battery performed well in every respect, meeting or exceeding all expectations. Since then, one of the 1megawatt units has been put into commercial operation in Pennsylvania and has consistently performed according to specification. The second 1 megawatt unit was recently moved to a location in Texas to provide the same kind of service in that location.

Since May 2008, we have been refining our energy storage solution for the electrical power industry and meeting with potential customers. Because of the significant cost and customization involved in the purchase and sale of a multi-megawatt battery storage system, lead times are long in this industry. However, we are in active negotiations with a number of potential purchasers. As of December 31, 2011, we are producing three multi-megawatt storage systems to satisfy customer orders. We were also selected by Inversiones Energéticas, S.A. de C.V. (INE), one of El Salvador's largest electric utilities, to provide a turn-key 10 Megawatt ALTI-ESS advanced battery system for frequency control at its Talnique Power Station. This project was delayed in 2011 as a result of obtaining necessary regulatory approvals to enable energy storage on the El Salvador electric grid. We believe necessary regulatory approvals will be received in 2012 permitting the project to move forward.

Hybrid Electric and All Electric Commercial Vehicles and Buses. We have been supplying Proterra Inc., a leading designer and manufacturer of heavy-duty drive systems, vehicle control systems, transit buses, and fast charging stations, with battery modules since 2009. In June of 2010, we formalized this relationship with the signing of a long-term supply agreement to provide our advanced lithium-ion battery modules for incorporation into Proterra's all-electric and hybrid-electric buses. Proterra's flagship EcoRideTM, BE-35 is a 35-foot all-electric transit bus designed from the ground up to enable transit agencies to replace conventional diesel buses on a one-for-one basis with the world's first all-electric buses. This is accomplished by combining Proterra's light-weight composite body, highly efficient ProDriveTM, advanced TerraVoltTM energy storage system and on-route rooftop FastFillTM station to provide the first full size transit vehicle that meets California's Zero Emission Bus (Zbus) Rules. Proterra's FastFillTM charge system is comprised of the software and hardware to rapidly charge the TerraVoltTM Energy Storage System (powered by our battery modules) from 0% to 95% with >92% energy charge efficiency in as little as six minutes. The combination of these systems provides a potentially disruptive solution to fleet vehicle operators offering fuel efficiencies between 17.5 and 29 miles per gallon (diesel equivalent range) which is on average more than 500% better than competing solutions.

Proterra is currently working on projects in Texas, Florida and South Carolina. They previously announced that five major urban transit agencies received more than $25 million in grants from the Federal Transit Administration (FTA) to purchase 20 fast charge battery electric buses and 4 EV charging stations. To our knowledge, the only vehicles that can meet the specifications in the grants are Proterra's EcoRide BE-35™ buses and FastFill™ Charging Stations. Proterra had indicated it was close to closing large contracts in Europe and South America. To meet this increase in demand, Proterra is in the process of expanding its production capacity to a goal of more than 1,500 buses per year with the ability to expand further if necessary. As Proterra continues to grow we look forward to expanding our relationship and working together to enhance the value of their transit solutions.

Our Relationship with YTE. In addition, we, Altairnano and Zhuhai Yintong Energy Company Ltd. ("YTE") entered into a Conditional Supply and Technology Licensing Agreement (the "Supply Agreement") on September 20, 2010. Pursuant to the Supply Agreement, YTE agreed to purchase nano lithium titanate, 11 Ahr battery cells and a 1 megawatt ALTI-ESS system from us for an aggregate purchase price of $6.6 million for delivery over the coming years. A portion of nano lithium titanate and the battery cells and ALTI-ESS have already been delivered. YTE's obligation to purchase the remainder of the nano lithium titanate has been suspended, we expect that it will remain suspended indefinitely. The Supply Agreement also includes an agreement to license our nano lithium titanate manufacturing technology at no cost to the owner of a manufacturing facility in China, as long as we own a majority of the owner of such facility. In addition, under the Supply Agreement, we grant to YTE a license to use our battery technology to manufacture batteries during a term commencing on the effective date of the Supply Agreement and continuing as long as YTE purchases at least 60 tons of nano lithium titanate annually. The battery technology license is exclusive in China (including Taiwan, Hong Kong and Macau) as long as YTE purchases at least 1,000 tons of nano lithium titanate per year after 2010 and is non-exclusive in the remainder of Asia (excluding the Middle East), Australia and New Zealand.

Military Relationships. In January 2008, we entered into a development agreement with the Office of Naval Research for $2,490,000. This was a cost reimbursement agreement whereby we developed a proof of concept battery system consisting of two 50-80 kilowatt hour batteries. All testing associated with ONR Phase I was successfully completed in November 2008. We entered into Phase II in May of 2009 and successfully completed all work in this final phase as of December 31, 2010. As a condition to closing our funding transaction with Canon, we ceased all operations in the military market as of December 31, 2010.

Expansion Into China. In 2012, we plan to form one or more Wholly Foreign Owned Enterprises ("WFOE") in China. We expect that a meaningful portion of our sales, and eventually our manufacturing, will be conducted by a WFOE in China. We are in the early stage of this initiative.

Proprietary Rights

We have been awarded a total of 12 U.S. and 42 foreign patents. We have a total of 7 U.S. and 37 foreign patent applications pending. The granted patents covering our nano lithium titanate technology include: 1) Method for producing catalyst structures, 2) Method for producing mixed metal oxides and metal oxide compounds, 3) Process for making lithium titanate, 4) Process for making nano-sized and sub-micron-sized lithium-transition metal oxides, and 5) High performance Lithium Titanium spinel Li4Ti5o12 for electrode material. The U.S. patents expire beginning in 2020.

Pending patent applications are directed to a variety of inventions related to aspects of our electrochemical cells including: "Lithium-Ion Batteries and the Methods of Operating the Same"; "Method for Preparing a Lithium-Ion Cell"; and "Method for Preparing a Lithium-Ion Battery."

Competition

Electric Grid A number of battery producers have stated an intent to compete in the frequency regulation and fast energy storage markets; however, to date there are only three that we have directly competed against in customer frequency regulation opportunities and renewable energy integration projects. They are A123 Systems, Inc. ("A123"), ExtremePower, and Beacon Power Corporation ("Beacon"). In 2011, Beacon Power filed for Chapter 11 bankruptcy protection. As we or others begin to demonstrate traction in this market we expect to see increasing levels of competition from other credible suppliers. A123 has installed a 2 megawatt battery system in Southern California working with The AES Corporation to demonstrate its ability to provide a frequency regulation service. Unlike the independently conducted stress and performance tests that our 2 megawatt battery system was subjected to in

Indianapolis in 2008, where the conclusions of the tests were made publicly available, the performance results of the A123 battery system have not been made public. We are not aware of any direct sales of Beacon's frequency regulation product to end customers. However, Beacon is constructing a 20 megawatt facility in Stephentown, New York that we understand they will own and operate themselves to provide frequency regulation in the New York market. Unlike A123 or Altair, Beacon employs a flywheel technology to provide frequency regulation.

Our products typically compete with existing or alternative technologies for providing frequency regulation and renewables integration rather than a competitor battery manufacturer. However, we expect this situation to change as the market accepts this storage technology to a greater degree. Today most utilities and regional transmission organizations use existing coal, gas and diesel generating sources to provide frequency regulation. Although these sources are inefficient and highly polluting compared to our solution, they are known quantities and accepted by the various regulators and utilities. In many instances, particularly in the U.S., we are attempting to displace this accepted way of doing things. Consequently, there is a longer education and justification period required to help the customer understand the total costs of their current approach and the benefits, both financial and environmental, of switching to our solution. Another major challenge is the significantly lower cost of natural gas in the U.S. Much of the existing frequency regulation in the U.S. is provided by natural gas powered generators. As a result, there is less of a financial incentive for utilities to implement our solution. This cost environment, however, is not the case in many foreign countries. As a result, we see greater immediate opportunities for our frequency regulation products outside of the U.S. Once this new energy storage capability starts to get market traction, we expect the rate of acceptance to accelerate. Until then, however, we are experiencing a long sales cycle and don't expect that to materially change in the near future. We believe that once we demonstrate revenue traction and demonstrate that the market does exist and is very large, other larger suppliers may also target this market.

Transportation (Commercial Vehicles) In the automotive passenger car markets, there are a large number of battery manufacturers and systems integrators currently serving the market. Many of them are larger companies with substantially stronger financial resources than we have. We believe this market will be driven by low margins and volume. As a result we believe that only larger, well-capitalized companies will ultimately be successful in this market. We believe that commercial vehicles, including buses, medium- and heavy-duty trucks, on the other hand, present a different set of dynamics. The characteristics of our batteries are an excellent fit to satisfy the requirements of this market, and the needs here are different than in the general passenger car automotive market. We believe that we can be a successful competitor in this segment of the overall transportation market.

With respect to the electric and hybrid electric commercial vehicle markets, we are not aware of any commercially available products that have similar performance attributes as our nano lithium titanate batteries. Nonetheless, competitors have announced advanced lithium ion batteries and battery products aimed at these markets. Some may have greater energy density than our nano lithium titanate batteries. However, we believe that these batteries do not match the cycle life, rapid charge and discharge rates and performance at temperature extremes of our nano lithium titanate batteries.

Currently, NiMH batteries dominate the hybrid electric vehicle market, including the mass-transit market. NiMH batteries improve upon the energy capacity and power capabilities of older alternatives, such as NiCd (for the same size cell) by 30% to 40%. Since they contain fewer toxins than NiCd batteries, NiMH batteries are more environmentally friendly than NiCd batteries, although they are not as environmentally friendly as our nano lithium titanate battery. Like NiCd batteries, NiMH batteries can be charged in about 3 hours. Charging rates must be reduced by a factor of 5 to 10 at temperatures below 0°C (32°F) and above 40°C (104°F). NiMH batteries suffer from poor deep cycle ability (i.e. the ability to be discharged to 10% or less of their capacity), possessing a recharge capability following deep discharge on the order of 200 to 300 cycles. While NiMH batteries are capable of high power discharge, dedicated usage in high power applications limits cycle life even further. NiMH batteries also possess high self-discharge rates, which is unintentional leaking of a battery's charge. NiMH batteries are intolerant to elevated temperature and, as a result, performance and capacity degrade sharply above room temperature. The most serious issue with NiMH, though, involves safety accompanying recharge. The temperature and internal pressure of a NiMH battery cell rises sharply as the cell nears 100% state of charge, necessitating the inclusion of complex cell monitoring electronics and sophisticated charging algorithms in order to prevent thermal runaway, and ultimately fire. A potential limiting factor for the widespread use of NiMH batteries may be the supply of nickel, potentially rendering the technology economically infeasible for these applications as demand continues to rise.

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Producers of electric and hybrid electric vehicles are seeking to replace NiMH batteries with lithium ion batteries for several reasons. The demand for these vehicles is placing pressures on the limited supply of nickel, potentially rendering the technology economically infeasible for these applications as the demand continues to rise. Compared to NiMH batteries, conventional lithium ion batteries are stable, charge more rapidly (in hours), exhibit low self-discharge, and require very little maintenance. Except as explained below, the safety, cycle life, calendar life, environmental impact and power of lithium ion batteries is comparable to those of NiMH and NiCd batteries.

Conventional lithium ion batteries are the batteries of choice in small electronics, such as cell phones and portable computers, where high energy density and light weight are important. These same attributes are desired for electric vehicle, hybrid electric vehicle, fast energy storage and other markets. However, these applications are principally high power demand applications and/or pose other demands on usage, such as extremes of temperature, need for extremely short recharge times, and even longer extended lifetimes. Because of safety concerns related principally to the presence of graphite in conventional lithium ion batteries, conventional graphite-based lithium ion batteries sufficiently large for such power uses may raise safety concerns. In addition, current lithium ion technology is capable of about 1,000 to 3,000 cycles and has a life of about 3 years, whereas the vehicles in which they are used may have lifetimes as long as 10 to 15 years and require much larger cycle life. Conventional lithium ion batteries also do not function well at extremely hot or cold temperatures. Our batteries --which are safer, have a longer cycle life, rapid charge and discharge rates and function well at extreme temperatures -- are designed to address the power market by providing the key benefits of lithium ion batteries without the shortcomings relative to the power market.

Research and Development Expenses

Total research and development expenses were $7.0 million, $8.2 million and $9.4 million for the years ended December 31, 2011, 2010 and 2009, respectively, while research and development costs funded by customers were $367,000, $4.3 million and $2.9 million, for the years ended December 31, 2011, 2010 and 2009, respectively.

Dependence on Significant Customers

During the year ended December 31, 2011, we recorded revenues from two major customers who accounted for 40% and 34% of total revenues as follows: Proterra Corporation revenues of $2.1 million and YTE revenues of $1.8 million.

Government Regulation

Most of our current and proposed activities are subject to numerous federal, state, and local laws and regulations concerning machine and chemical safety and environmental protection. Such laws include, without limitation, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation Liability Act. We are also subject to laws governing the packaging and shipment of some of our products, including our nano lithium titanate batteries. Such laws require that we take steps to, among other things, maintain air and water quality standards, protect threatened, endangered and other species of wildlife and vegetation, preserve certain cultural resources, reclaim processing sites and package potentially flammable materials in appropriate ways and pass stringent government mandated testing standards before shipping our battery products.

Compliance with federal, state, or local laws or regulations represents a small part of our present budget. If we fail to comply with any such laws or regulations, however, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our development.

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Environmental Regulation and Liability

Any proposed processing operation at our main operating facilities in Reno, Nevada and Anderson, Indiana and any other property we use will be subject to federal, state, and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation, and/or removal of substances discovered at any other property used by us; to the extent the substances are deemed by the federal and/or state government to be toxic or hazardous. Courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal, or transportation of hazardous substances. We use hazardous substances in our testing and operations and, although we employ reasonable practicable safeguards to prevent any liability under applicable laws relating to hazardous substances, companies engaged in materials production are inherently subject to substantial risk that environmental remediation will be required.

Financial Information about Segments and Foreign Sales

Information with respect to assets, net sales, loss from operations and depreciation and amortization for the Power and Energy Group, and the All Other Division is presented in Note 17, Business Segment Information, of Notes to Consolidated Financial Statements in Part IV.

Information with respect to foreign and domestic sales and related information is also presented in Note 17, Business Segment Information, of Notes to Consolidated Financial Statements in Part IV.

Subsidiaries

Altair Nanotechnologies Inc. was incorporated under the laws of the province of Ontario, Canada in April 1973 under the name Diversified Mines Limited, which was subsequently changed to Tex-U.S. Oil & Gas Inc. in February 1981, then to Orex Resources Ltd. in November 1986, then to Carlin Gold Company Inc. in July 1988, then to Altair International Gold Inc. in March 1994, then to Altair International Inc. in November 1996 and then to Altair Nanotechnologies Inc. in July 2002. In July 2002, Altair Nanotechnologies Inc. redomesticated from the Ontario Business Corporations Act to Canada's federal corporate statute, the Canada Business Corporations Act.

Altair US Holdings, Inc. was incorporated by Altair in December 2003 for the purpose of facilitating a corporate restructuring and consolidation of all U.S. subsidiaries under a U.S. holding company. At the completion of the corporate restructuring, Fine Gold, MRS, and Altairnano, Inc. (f/k/a Altair Nanomaterials, Inc.) were direct wholly-owned subsidiaries of Altair US Holdings, Inc., while Tennessee Valley Titanium, Inc. previously a wholly-owned subsidiary of MRS, was dissolved on July 7, 2006.

Altair acquired Fine Gold in April 1994. Fine Gold has earned no operating revenues to date. Fine Gold acquired the intellectual property associated with the now defunct Altair jig, a fine particle separation device for use in minerals processing, in 1996. Fine Gold was formally dissolved on December 30, 2008.

Mineral Recovery Systems, Inc., or MRS, was incorporated in April, 1987 and was formerly known as Carlin Gold Company. MRS previously has been involved in the exploration for minerals on unpatented mining claims in Nevada, Oregon and California and the holding of mineral leases in Tennessee. MRS currently does not hold any properties or leases.

Altair Nanomaterials Inc. was incorporated in 1998 as a wholly-owned subsidiary of MRS and holds all of our interest in our nanomaterials and titanium dioxide pigment technology and related assets. Altair Nanomaterials Inc. was subsequently renamed Altairnano, Inc. on July 6, 2006.

AlSher Titania LLC was incorporated in April 2007 as a joint venture company which was 70% owned by Altairnano, Inc. until this interest was sold to Sherwin-Williams on April 30, 2010. This company was formed to combine certain technologies of Altairnano, Inc. with the Sherwin-Williams Company in order to develop, market, and produce titanium dioxide pigment for use in a variety of applications.

Corporate History

Altair Nanotechnologies Inc. was incorporated under the laws of the Province of Ontario, Canada in April 1973 for the purpose of acquiring and exploring mineral properties. It was redomesticated in July 2002 from the Business Corporations Act (Ontario) to the Canada Business Corporations Act, a change that causes Altair to be governed by Canada's federal corporate statute. The change reduced the requirement for resident Canadian directors from 50% to 25% of the board of directors, which gave us greater flexibility in selecting qualified nominees to our board.

During the period from inception through 1994, we acquired and explored multiple mineral properties. In each case, sub-economic mineralization was encountered and the exploration was abandoned.

Beginning in 1996, we entered into leases for mineral property near Camden, Tennessee and owned the rights to the Altair jig. However, we have terminated our leases on all of the Tennessee mineral properties and during 2009 disposed of the remaining centrifugal jigs and abandoned the applicable patents since we were unable to identify an interested party to purchase them.

In November 1999, we acquired all the rights of BHP Minerals International, Inc., or BHP, in the nanomaterials and titanium dioxide pigment technologies and the nanomaterials and titanium dioxide pigment assets from BHP. We are employing the nanomaterials technology as a platform for the production and sale of metal oxide nanoparticles in our nano lithium titanate batteries.

During 2010, the Company investigated domesticating from Canada to the state of Nevada and secured shareholder approval to do so. However, in conjunction with the pending Canon investment, the Board determined that it was not in the best interests of shareholders to do so at that time. We have since restarted this domestication process to the state of Delaware and expect to have this process completed in April 2012.

We have experienced an operating loss in every year of operation. In the fiscal year ended December 31, 2011, we experienced a net loss of $19.9 million.

We completed a four-for-one reverse stock split during November 2010. All share and per share amounts included in this filing have been restated for the effects of this reverse stock split.

In July 2011, Energy Storage (China), an indirect subsidiary of Canon, acquired 37,036,807 common shares, representing 53% of the outstanding common shares of Altair Nanotechnologies Inc.

Employees

Our business is currently managed by H. Frank Gibbard, Ph.D., President and Chief Executive Officer, Mr. Stephen B. Huang, Chief Financial Officer, Dr. Bruce Sabacky, Chief Technology Officer, Mr. Tom Kieffer, Vice President Marketing & Sales, and Mr. C. Robert Pedraza, Vice President Corporate Strategy and Business Development. We have 77 additional regular employees. As of December 31, 2011, we have employment agreements with Messrs. Gibbard, Huang, Kieffer, Pedraza and Sabacky, as well as various technical employees.

During 2012 we anticipate hiring additional employees, primarily in operations, engineering and sales. Such additional hiring, if it occurs, will be dependent upon business volume growth.

Available Information

We file annual, quarterly and current reports and other information with the SEC. These materials can be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials may also be obtained by mail at prescribed rates from the SEC's Public Reference Room at the above address. Information about the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy information statements, and other information regarding issuers that file electronically with the SEC. The address of the SEC's Internet site is www.sec.gov.

We make available, free of charge on our Internet website located at www.altairnano.com behind the “Investors” tab under “SEC Filings,” our most recent Annual Report on Form 10-K, our most recent Quarterly Report on Form 10-Q, any current reports on Form 8-K filed since our most recent Annual Report on Form 10-K and any amendments to such reports as soon as reasonably practicable following the electronic filing of such report with the SEC. In addition, we provide electronic or paper copies of our filings free of charge upon request.

Enforceability of Civil Liabilities against Foreign Persons

We are a Canadian corporation, and three of our directors and our Canadian legal counsel are residents of Canada, and five of our directors are residents of China. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the U.S. securities laws. It is uncertain whether Canadian or Chinese courts would enforce judgments of U.S. courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of U.S. securities laws or impose liability in original actions against us or our directors, officers or experts predicated upon U.S. securities laws.

Forward-Looking Statements

This Report contains various forward-looking statements. Such statements can be identified by the use of the forward-looking words “anticipate,” “estimate,” “project,” “likely,” “believe,” “intend,” “expect,” or similar words. statements discuss future expectations, contain projections regarding future developments, operations, or financial conditions, or state other forward-looking information. When considering such forward-looking statements, you should keep in mind the risk factors noted in Item 1A and other cautionary statements throughout this Report and our other filings with the SEC. You should also keep in mind that all forward-looking statements are based on management’s existing beliefs about present and future events outside of management’s control and on assumptions that may prove to be incorrect. If one or more risks identified in this Report or any other applicable filings materializes, or any other underlying assumptions prove incorrect, our actual results may vary materially from those anticipated, estimated, projected, or intended.

Item 1A. Risk Factors.

An investment in our common shares and related derivative securities involves significant risks. You should carefully consider the risks described in this Report before making an investment decision. Any of these risks could materially and adversely affect our business, financial condition or results of operations. In such case, you may lose all or part of your investment. Some factors in this section are forward-looking statements.

We may continue to experience significant losses from operations.

We have experienced a net loss in every fiscal year since our inception. Our loss from operations was $19.9 million for the twelve months ended December 31, 2011. We may never be profitable in the future. Even if we are profitable in one or more future years, subsequent developments in the economy, our industry, customer base, business or cost structure, or an event such as significant litigation or a significant transaction, may cause us to again experience losses.

We may not be able to raise sufficient capital to finance our operations due to our operating results, market conditions and similar factors.

As of December 31, 2011, we had approximately $46.5 million in cash and cash equivalents; however, a significant portion of this capital is earmarked for expansion of operations into China. As a result, we expect that in the future we will again need to raise capital. With respect to any such capital raise, we may be unable to raise the amount of capital needed and may be forced to pay an extremely high price for capital. Factors affecting the availability and price of capital may include the following:

- market factors affecting the availability and cost of capital generally, including increases or decreases in major stock market indexes, the stability of the banking and investment banking systems and general economic stability or instability;
- the price, volatility and trading volume of our common shares;
- our financial results, particularly the amount of revenue we are generating from product sales;
- the market's perception of our ability to execute our business plan and any specific projects identified as uses of proceeds;
- our ownership structure and recent or anticipated dilution;
- the amount of our capital needs;
- the market's perception of our company and companies in our line of business; and
- the economics of projects being pursued.

If we are unable to raise required capital we may be forced to discontinue operations.

We have entered into contractual provisions that may significantly limit our ability to raise capital in the near term.

In conjunction with the March 2011 “registered direct” offering, we entered a Securities Purchase Agreement pursuant to which we agreed that we would not sell securities at a price below $2.23 per share for a two-year period ending March 2013, unless the March 2011 transaction is approved by our shareholders. Such approval will eliminate the floor on an exercise price adjustment in the warrants issued as part of the March 2011 offering. If we do not either obtain shareholder approval or cause the parties to the Securities Purchase Agreement to waive or amend this restriction, our ability to raise capital prior to March 2013 will be significantly impaired. This may affect our ability to obtain cash necessary to continue operation.

In addition, in conjunction with the closing of purchase by an affiliate of Canon Investment Holdings Ltd. of shares representing over 50% of our outstanding shares in 2011, we granted certain rights to Canon, including the right to proportional representation on our Board of Directors, certain registration rights, and an option to purchase a sufficient number of our equity securities at market price to maintain their percentage of ownership should we offer, sell or issue new securities. These rights may dissuade potential investors from purchasing our capital or may require us to accept less than favorable terms in future financings.

Laws governing repatriation of investments in a China WFOE may contribute to a need to obtain capital to finance our non-China operations in the near future.

Any business that we conduct in China will likely be through a Wholly Foreign Owned Enterprise, or WFOE, that we establish. When establishing a WFOE, we are required to designate a minimum registered capital amount and contribute at least such amount to the WFOE. Chinese law severely limits the ability of a WFOE to repatriate money to its non-Chinese parent. In general, any distributions to the non-Chinese parent must derive from profits, as determined in accordance with Chinese accounting standards and regulations. Our WFOE will also be required to set aside at least 10% of its after-tax profit based on Chinese accounting standards each year to a statutory surplus reserve fund until the accumulative amount of such reserve reaches 50% of registered capital.

These reserves are not distributable as dividends. In addition, our WFOE may be required to allocate a portion of its after-tax profit to a staff welfare and bonus fund. Moreover, if our WFOE incurs debt on its own behalf in the future, the instruments governing the debt may restrict our WFOE's ability to pay dividends or make other distributions to us. Any limitation on the ability of our WFOE to distribute dividends and other distributions to us could materially and adversely limit our ability to make investments or enter into joint ventures that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

We may become subject to international economic and political risks over which we have little or no control and may be unable to alter our business practice in time to avoid the possibility of reduced revenues.

We plan to conduct a portion of our business in China. Doing business outside the United States, particularly in China, subjects us to various risks, including changing economic and political conditions, major work stoppages, exchange controls, currency fluctuations, armed conflicts and unexpected changes in United States and foreign laws relating to tariffs, trade restrictions, transportation regulations, foreign investments and taxation. We have no control over most of these risks and may be unable to anticipate or adapt to changes in international economic and political conditions. This may lead to sudden and unexpected revenue reductions or expense increases.

China’s economic policies could affect our business.

Our business plan currently anticipates that a substantial portion of our assets will be located in China and a portion of our revenue will be derived from Chinese operations. Accordingly, our results of operations and prospects will become subject, to a significant extent, to the economic, political and legal developments in China.

While China’s economy has experienced significant growth in the past twenty years, such growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall economy of China, but they may also have a negative effect on us. For example, operating results and financial condition may be adversely affected by the government control over capital investments or changes in tax regulations. The economy of China has been transitioning from a planned economy to a more market-oriented economy. In recent years, the PRC government has implemented measures emphasizing the utilization of market forces for economic reform and the reduction of state ownership of productive assets, and the establishment of corporate governance in business enterprises; however, a substantial portion of productive assets in China are still owned by the PRC government. In addition, the PRC government continues to play a significant role in regulating industry development by imposing industrial policies. It also exercises significant control over China’s economic growth through the allocation of resources, the control of payment of foreign currency-denominated obligations, the setting of monetary policy and the provision of preferential treatment to particular industries or companies. Any adverse change in the economic conditions or government policies in China could directly harm our business or harm overall economic growth in China, which in either case could increase our expenses and decrease expected revenues.

We may have difficulty establishing adequate management, legal and financial controls in China.

China historically has not adopted an international style of management or financial reporting concepts and practices, nor modern banking, computer and other control systems. As a result of difference in management, accounting and cultural norms, we may experience difficulty in establishing management, legal and financial controls, collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet international standards.

If relations between the United States and China worsen, investors may be unwilling to hold or buy our stock and our stock price may decrease.

At various times during recent years, the United States and China have had significant disagreements over political and economic issues. Controversies may arise in the future between these two countries. Any political or trade controversies between the United States and China, whether or not directly related to our business, could reduce the price of our common stock.

China could change its policies toward private enterprise or even nationalize or expropriate private enterprises.

Our business is expected to be subject to significant political and economic uncertainties and may be affected by political, economic and social developments in China. Over the past several years, the PRC government has pursued economic reform policies including the encouragement of private economic activity and greater economic decentralization. The PRC government may not continue to pursue these policies or may significantly alter them to our detriment from time to time with little, if any, prior notice.

Changes in policies, laws and regulations or in their interpretation or the imposition of confiscatory taxation, restrictions on currency conversion, restrictions or prohibitions on dividend payments to shareholders, or devaluations of currency could cause a decline in the price of our common stock.

The nature and application of many laws of China create an uncertain environment for business operations and they could have a negative effect on us.

The legal system in China is a civil law system. Unlike the common law system, the civil law system is based on written statutes in which decided legal cases have little value as precedents. In 1979, China began to promulgate a system of laws and has since introduced many laws and regulations to provide general guidance on economic and business practices in China and to regulate foreign investment. Progress has been made in the promulgation of laws and regulations dealing with economic matters such as corporate organization and governance, foreign investment, commerce, taxation and trade. The promulgation of new laws, changes of existing laws and the abrogation of local regulations by national laws could cause a decline in the price of our common stock. In addition, as these laws, regulations and legal requirements are relatively recent, their interpretation and enforcement involve significant uncertainty.

Furthermore, the political, governmental and judicial systems in China are sometimes impacted by corruption. There is no assurance that we will be able to obtain recourse in any legal disputes with suppliers, customers or other parties with whom we conduct business.

Following the acquisition of a majority interest in the company by an affiliate of Canon, we face risks associated with having a majority shareholder.

In July 2011, an affiliate of Canon acquired a majority of our outstanding common shares. This presents certain risks to us, including the following:

- Certain of our existing or potential customers or suppliers may be reluctant to do business with a company controlled by a single shareholder, or a China-based affiliate of a battery manufacturer, and, as a result, may cancel or choose not to make, orders.

- We have experienced, and may continue to experience, significant turnover in key management, technical or other employees, resulting in loss of talent and company-specific knowledge and experience;

- Because of the physical distance, cultural differences and language difference between the United States and China, we may experience conflicts or inefficiencies in Board-management communication, management-employee communication, strategy formation and other parts of our business; this risk may be exacerbated by the fact that most of the directors nominated by Canon do not speak English;

- We plan to spend a portion, which may be substantial, of the proceeds from the Canon transaction on a sales office, and eventually manufacturing and/or assembly facilities, in China; this project may divert management attention and consume a significant amount of capital without anticipated results; and

- We plan to relocate a significant portion of our operations to China. We have no patents in China protecting our intellectual property and believe that our ability to protect our trade secrets through agreements and litigation is limited. As a result, we may be unable to stop others from using our intellectual property in China.

- As a majority shareholder, Canon may be able to influence our Board of Directors to enter into transactions with Canon affiliates, or third parties that are more favorable to such Canon affiliate or third party than would be negotiated by an independent Board of Directors. A particular risk in this area relates to the protection of trade secrets if, and as, employees of Canon affiliates, such as YTE, are hired by us and/or we participate in joint development or technology development and sharing arrangements with YTE or other Canon affiliates; and

- Our new Board of Directors may direct us to abandon significant existing initiatives and direct technical, manufacturing and sales resources toward new products or projects. Any significant change in direction of the business may delay an expected increase in revenues as we start a new development or sales cycle for one or more new products or services.

If one or more of these risks, or other risks, materializes, our business will be harmed, and it may be harmed materially.

We may not realize anticipated benefits from our agreement with Inversiones Energeticas.

In February 2011, we entered into a purchase contract with Inversiones Energeticas, S.A. de C.V., or INE, related to the purchase of a turn-key 10 Megawatt ALTI-ESS advanced battery system for $18 million. Projected revenue under this agreement represented a substantial portion of our expected revenue in 2011 and represents a substantial portion of our projected revenue for 2012. On April 15, 2011, as a result of unexpected regulatory issues, INE notified us that they needed to cancel the contract in accordance with its terms. INE subsequently stated that such letter was not intended to effect a termination of the contract, but merely to provide notice of its initial failure to obtain regulatory approval, which would automatically effect a termination of the contract if the issue was not resolved within 120 days, subject to extension by the parties. We have entered into several extensions in order to allow the various parties additional time to resolve these regulatory issues. We may be unable to resolve the regulatory issues with the existing agreement or may otherwise be unable to enter into a new agreement with INE. If not, we will lose anticipated revenue and lose the expected marketing benefits we expected following the completion of the installation of the ALTI-ESS system. This will harm our short-term revenue projections and possibly our long-term revenue potential.

Our nano lithium titanate battery materials and battery business is currently dependent upon a few customers and potential customers, which presents various risks.

Our nano lithium titanate battery materials and battery business is dependent upon a few current or potential customers, including a small number of power producers, an affiliate of Canon and smaller companies developing electric or hybrid electric buses. In addition, many of these customers are, or are expected to be, development partners who are subsidizing the research and development of products for which they may be the sole, or one of a few, potential purchasers. As a result of the small number of potential customers and partners, our existing or potential customers and partners may have significant leverage on pricing terms, exclusivity terms and other economic and noneconomic terms. This may harm our attempts to sell products at prices that reflect desired gross margins. In addition, the decision by a single or potential customer to chose not to purchase or abandon the use or development of a product may significantly harm both our financial results and the development track of one or more products.

We may be obligated to pay a royalty on sales into the stationary power market.

In a joint development agreement we entered into in 2007 to develop a collection of advanced lithium based battery systems to provide frequency regulation and other services to the electricity generations and transmission markets, we granted a royalty of 5% of the gross revenue we realize from the sale of certain battery systems through July 20, 2012. It is uncertain whether the battery systems we are marketing are within the scope of the royalty provisions. As we begin generating revenue from the sale of large scale stationary batteries for use in connection with electrical transmission and regulation, there is a reasonable likelihood that we will be required to pay this royalty. This would harm our gross margins on such sales. We may also incur litigation expenses, and management attention may be diverted from the operation of our business.

We depend upon several sole-source and limited-source third-party suppliers.

We rely on certain suppliers as the sole-source, or as a primary source, of certain services, raw materials and other components of our products. We do not yet have long-term supply or service agreements engaged with any such suppliers. As a result, the providers of such services and components could terminate or alter the terms of service or supply with little or no advance notice. If our arrangements with any sole-source supplier were terminated, or if such a supplier failed to provide essential services or deliver essential components on a timely basis, failed to meet our product specifications and/or quality standards, or introduced unacceptable price increases, our production schedule would be delayed, possibly by as long as six months. Any such delay in our production schedule would result in delayed product delivery and may also result in additional production costs, customer losses and litigation.

An area in which our dependence upon a limited number of sources creates significant vulnerability is the manufacturing of our nano lithium titanate cells. As of the date hereof, we have two contract manufacturing sources for our nano lithium titanate cells. We have had quality issues with both contract manufacturers. Our nano lithium titanate battery cells are the building blocks of all of our products (other than our nano lithium titanate powder). If we continue to experience quality issues with our suppliers, we may be unable to meet our deadlines, or quality specifications, with respect to existing or future orders. This would harm our reputation and our ability to grow our business.

Our operating results have fluctuated significantly in the past and will continue to fluctuate in the future, which could cause our stock price to decline.

Our operating results have fluctuated significantly in the past, and we believe that they will continue to fluctuate in the future, due to a number of factors, many of which are beyond our control. If in future periods our operating results do not meet the expectations of investors or analysts who choose to follow our company, the price of our common shares may fall. Factors that may affect our operating results include the following:

- fluctuations in the size, quantity and timing of customer orders;
- timing of delivery of our services and products;
- additions of new customers or losses of existing customers;
- positive or negative business or financial developments announced by us or our key customers;
- our ability to commercialize and obtain orders for products we are developing;
- costs associated with developing our manufacturing capabilities;
- the retention of our key employees;
- new product announcements or introductions by our competitors or potential competitors;
- the effect of variations in the market price of our common shares on our equity-based compensation expenses;
- disruptions in the supply of raw materials or components used in the manufacture of our products;
- the pace of adoption of regulation facilitating our ability to sell our products in our target markets;
- technology and intellectual property issues associated with our products;
- general political, social, geopolitical and economic trends and events; and
- availability of components sourced from Korea if tensions between North Korea and South Korea erupt into a greater military conflict.

Our patents and other protective measures may not adequately protect our proprietary intellectual property.

We regard our intellectual property, particularly our proprietary rights in our nano lithium titanate technology, as critical to our success. We have received various patents, and filed other patent applications, for various applications and aspects of our nano lithium titanate technology and other intellectual property. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons, including the following:

- Our pending patent applications may not be granted for various reasons, including the existence of conflicting patents or defects in our applications, if there was in existence relevant prior art or the invention was deemed by the examiner to be obvious to a person skilled in the art whether or not there were other existing patents. Risks associated with patent applications are enhanced because patent applications of others remain confidential for a period of approximately 18 months after filing; as a result, our belief that we are the first creator of an invention or the first to patent it may prove incorrect, as information related to conflicting patents is first published or first brought to our attention;

- The patents we have been granted may be challenged, invalidated, narrowed or circumvented because of the pre-existence of similar patented or unpatented intellectual property rights or for other reasons;

- The costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may make aggressive enforcement cost prohibitive;

- We have not filed for patent protection in many countries in which we are currently selling product or seek to sell product; as a result, we may be unable to prevent competitors in such markets from selling infringing products;

- Even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights; and

- Other persons may independently develop proprietary information and techniques that, although functionally equivalent or superior to our intellectual proprietary information and techniques, do not breach proprietary rights.

Our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and involve adverse publicity and adverse results.

Competitors or others may infringe our patents. To counter infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming. Interference proceedings brought by the United States Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications. Litigation or interference proceedings may result in substantial costs and be a distraction to our management.

Because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure. In addition, during the course of this litigation (even if ultimately successful), there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common shares.

In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover that technology. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

We may not prevail in any litigation or interference proceeding in which we are involved. Even if we do prevail, these proceedings can be expensive, result in adverse publicity and distract our management.

Other parties may bring intellectual property infringement claims against us, which would be time-consuming and expensive to defend, and if any of our products or processes is found to be infringing, we may not be able to procure licenses to use patents necessary to our business at reasonable terms, if at all.

Our success depends in part on avoiding the infringement of other parties' patents and proprietary rights. We may inadvertently infringe existing third-party patents or third-party patents issued on existing patent applications. Third party holders of such patents or patent applications could bring claims against us that, even if resolved in our favor, could cause us to incur substantial expenses and, if resolved against us, could cause us to pay substantial damages.

Under some circumstances in the United States, these damages could be triple the actual damages the patent holder incurs.

If we have supplied infringing products to third parties for marketing or licensed third parties to manufacture, use or market infringing products, we may be obligated to indemnify these third parties for any damages they may be required to pay to the patent holder and for any losses the third parties may sustain themselves as the result of lost sales or damages paid to the patent holder. In addition, we have, and may be required to, make representations as to our right to supply and/or license intellectual property and to our compliance with laws. Such representations are usually supported by indemnification provisions requiring us to defend our customers and otherwise make them whole if we license or supply products that infringe on third party technologies or violate government regulations. Further, if a patent infringement suit were brought against us, we and our customers, development partners and licensees could be forced to stop or delay research, development, manufacturing or sales of products based on our technologies in the country or countries covered by the patent we infringe, unless we can obtain a license from the patent holder. Such a license may not be available on acceptable terms, or at all, particularly if the third party is developing or marketing a product competitive with products based on our technologies. Even if we were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property.

Any successful infringement action brought against us may also adversely affect marketing of products based on our technologies in other markets not covered by the infringement action. Furthermore, we may suffer adverse consequences from a successful infringement action against us even if the action is subsequently reversed on appeal, nullified through another action or resolved by settlement with the patent holder. As a result, any infringement action against us would likely harm our competitive position, be costly and require significant time and attention of our key management and technical personnel.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

We rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. Trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, contractors, consultants, outside scientific collaborators and other advisors to protect our trade secrets and other proprietary information. Parties to the confidentiality agreements may have such agreements declared unenforceable or, even if the agreements are enforceable, may breach such agreements. Remedies available in connection with the breach of such agreements may not be adequate, or enforcing such agreement may be cost prohibitive. Courts outside the United States may be less willing to protect trade secrets. In addition, others may independently discover our trade secrets or independently develop processes or products that are similar or identical to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection would harm our competitive business position.

If we are sued on a product liability claim, our insurance policies may not be sufficient.

Although we maintain general liability insurance and product liability insurance, our insurance may not cover all potential types of product liability claims to which manufacturers are exposed or may not be adequate to indemnify us for all liability that may be imposed. Any imposition of liability that is not covered by insurance or is in excess of our insurance coverage could harm our business, including our relationships with current customers and our ability to attract and retain new customers. In addition, if the liability were substantial relative to the size of our business, any uncovered liability could harm our liquidity and ability to continue as a going concern.

Laws regulating the manufacture or transportation of batteries may be enacted which could result in a delay in the production of our batteries or the imposition of additional costs that could harm our ability to be profitable.

At the present time, international, federal, state and local laws do not directly regulate the storage, use and disposal of the component parts of our batteries. However, laws and regulations may be enacted in the future which could impose environmental, health and safety controls on the storage, use and disposal of certain chemicals and metals used in the manufacture of lithium and lithium-ion batteries. Satisfying any future laws or regulations could require significant time and resources from our technical staff, including those related to possible redesign which may result in substantial expenditures and delays in the production of our product, all of which could harm our business and reduce our future profitability.

The transportation of lithium and lithium-ion batteries is regulated both domestically and internationally. Under recently revised United Nations recommendations and as adopted by the International Air Transport Association, our batteries and battery systems currently fall within the level such that they are not exempt and require a Class 9 designation for transportation. The revised United Nations recommendations and other recommendations are not U.S. law until such time as they are incorporated into the Hazardous Material Regulations of the U.S. Department of Transportation, or DOT. However, DOT has proposed new regulations harmonizing with the U.N. guidelines and is reviewing other proposed changes under consideration for inclusion. At present it is not known if or when the proposed regulations would be adopted by the United States. Although we fall under the equivalency levels for the United States and comply with all safety packaging requirements worldwide, future DOT or IATA approval process could require significant time and resources from out technical staff and, if redesign were necessary, could delay the introduction of new products.

If our warranty expense estimates differ materially from our actual claims, or if we are unable to estimate future warranty expense for new products, our business and financial results could be harmed.

Our warranty for our products ranges from one to three years from the date of sale, depending on the type of product and its application. We expect that in the future some of our warranties may extend for longer periods. Because our supply arrangements are negotiated, the scope of our product warranties differ substantially depending upon the product, the purchaser and the intended use; however, we have granted and may grant broad warranties, addressing such issues as leakage, cycle life and decline in power. We have a limited product history on which to base our warranty estimates. Because of the limited operating history of our batteries and battery systems, our management is required to make assumptions and to apply judgment regarding a number of factors, including anticipated rate of warranty claims, the durability and reliability of our products, and service delivery costs. Our assumptions could prove to be materially different from the actual performance of our batteries and battery systems, which could cause us to incur substantial expense to repair or replace defective products in the future and may exceed expected levels against which we have reserved. If our estimates prove incorrect, we could be required to accrue additional expenses from the time we realize our estimates are incorrect and also face a significant unplanned cash burden at the time our customers make a warranty claim, which could harm our operating results.

In addition, with our new products and products that remain under development, we will be required to base our warranty estimates on historical experience of similar products, testing of our batteries under laboratory conditions and limited performance information learned during our development activities with the customer. As a result, actual warranty claims may be significantly different from our estimates and our financial results could vary significantly from period-to-period.

Product liability or other claims could cause us to incur losses or damage our reputation.

The risk of product liability claims and associated adverse publicity is inherent in the development, manufacturing and sale of batteries and battery system. Certain materials we use in our batteries, as well as our battery systems, could, if used improperly, cause injuries to others. Improperly charging or discharging our batteries could cause fires. Any accident involving our batteries or other products could decrease or even eliminate demand for our products. Because some of our batteries are designed to be used in electric and hybrid electric buses, and because vehicle accidents can cause injury to persons and damage to property, we are subject to a risk of claims for such injuries and damages. In addition, we could be harmed by adverse publicity resulting from problems or accidents caused by third party products that incorporate our batteries. We could even be harmed by problems or accidents involving competing battery systems, if the market viewed our batteries as being vulnerable to similar problems. Any such claims, loss of customers or reputation harm would harm our financial results and ability to continue as a going concern.

Continuing adverse economic conditions could reduce, or delay demand for our products.

Although improving compared to recent years, the financial markets and general economic conditions are still relatively weak in certain geographic markets worldwide. Our products are targeted primarily at large power producers worldwide bus manufacturers and other industrial parties. Due to economic factors, companies and government agencies in some of our target markets have reduced, delayed or eliminated many research and development initiatives, including those related to energy storage. This reduction or delay in development spending by targeted key customers is hindering our development and production efforts and will continue to do so until development spending increases from current depressed levels.

The commercialization of many of our products is dependent upon the efforts of commercial partners and other third parties over which we have no or little control.

The commercialization of our principal products requires the cooperation and efforts of commercial partners and customers. For example, because completion and testing of our large-scale stationary batteries for power suppliers requires input from utilities and connection to a power network, commercialization of such batteries can only be done in conjunction with a power or utility company. The commercialization of transportation and other applications of our technology are also dependent, in part, upon the expertise, resources and efforts of our commercial partners. This presents certain risks, including the following:

- we may not be able to enter into development, licensing, supply and other agreements with commercial partners with appropriate resources, technology and expertise on reasonable terms or at all;

- our commercial partners may not place the same priority on a project as we do, may fail to honor contractual commitments, may not have the level of resources, expertise, market strength or other characteristics necessary for the success of the project, may dedicate only limited resources to, and/or may abandon, a development project for reasons, including reasons such as a shift in corporate focus, unrelated to its merits;

- our commercial partners may be in the early stages of development and may not have sufficient liquidity to invest in joint development projects, expand their businesses and purchase our products as expected or honor contractual commitments;

- our commercial partners may terminate joint testing, development or marketing projects on the merits of the projects for various reasons, including determinations that a project is not feasible, cost-effective or likely to lead to a marketable end product;

- at various stages in the testing, development, marketing or production process, we may have disputes with our commercial partners, which may inhibit development, lead to an abandonment of the project or have other negative consequences; and

- even if the commercialization and marketing of jointly developed products is successful, our revenue share may be limited and may not exceed our associated development and operating costs.

As a result of the actions or omissions of our commercial partners, or our inability to identify and enter into suitable arrangements with qualified commercial partners, we may be unable to commercialize apparently viable products on a timely and cost-effective basis, or at all.

Interest in our nano lithium titanate batteries is affected by energy supply and pricing, political events, popular consciousness and other factors over which we have no control.

Currently, our marketing and development efforts for our batteries and battery materials are focused primarily on stationary power and transportation applications. In the transportation market, batteries containing our nano lithium titanate materials are designed to replace or supplement gasoline and diesel engines. In the stationary power applications, our batteries are designed to conserve and regulate the stable supply of electricity, including from renewable sources. The interest of our potential customers and business partners in our products and services is affected by a number of factors beyond our control, including:

- economic conditions and capital financing and liquidity constraints;
- short-term and long-term trends in the supply and price of natural gas, gasoline, diesel, coal and other fuels;
- the anticipated or actual granting or elimination by governments of tax and other financial incentives favoring electric or hybrid electric vehicles and renewable energy production;
- the ability of the various regulatory bodies to define the rules and procedures under which this new technology can be deployed into the electric grid;
- the anticipated or actual funding, or elimination of funding, for programs that support renewable energy programs and electric grid improvements;
- changes in public and investor interest for financial and/or environmental reasons, in supporting or adopting alternatives to gasoline and diesel for transportation and other purposes;
- the overall economic environment and the availability of credit to assist customers in purchasing our large battery systems;
- the expansion or contraction of private and public research and development budgets as a result of global and U.S. economic trends; and
- the speed of incorporation of renewable energy generating sources into the electric grid.

Adverse trends in one or more of these factors may inhibit our ability to commercialize our products and expand revenues from our battery materials and batteries.

If we combine with other companies, we may be unable to successfully integrate our business, technology, management or other aspects of our business with the other party to the transaction.

As evidenced by our signing the Share Subscription Agreement with Canon and related agreements with YTE, we routinely consider entering into acquisition, strategic or combination transactions with other companies for strategic and/or financial reasons. We do not have extensive experience in conducting diligence on, evaluating, purchasing, merging with, selling to or integrating new businesses or technologies with other entities. If we do succeed in closing a combination with another company, we will be exposed to a number of risks, including:

- we may have difficulty integrating our assets, technologies, operations and personnel in connection with a business combination;
- our ongoing business and management's attention may be disrupted or diverted by transition or integration issues and the complexity of managing, or being a part of, a geographically or culturally diverse enterprises;
- we may find that the transaction does not further our business strategy or that the economic and strategic assumptions underlying the transaction have proved inaccurate;
- we may encounter difficulty entering and competing in new product or geographic markets;
- we may face business, product, structural or other limitations or prohibitions as our business becomes subject to the laws or customs of other jurisdictions; and

- we may experience significant problems or liabilities associated with product quality, technology and legal contingencies relating to the integrated business or technology, such as intellectual property or employment matters.

In addition, from time to time we may enter into negotiations for acquisitions, dispositions, mergers or other transactions that are not ultimately consummated. These negotiations could result in significant diversion of management time, substantial out-of-pocket costs and, while such transactions are pending, limitations on the operation of our business (including negotiation of alternative business combinations and capital raising transactions). To the extent we issue shares of capital stock or other rights to purchase capital stock in any such transactions, including options and warrants, existing stockholders would be diluted. Any of these issues will harm our business and financial condition.

Our competitors have more resources than we do, and may be supported by more prominent partners, which may give them a competitive advantage.

We have limited financial, personnel and other resources and, because of our early stage of development, have limited access to capital. We compete or may compete against entities that are much larger than we are, have more extensive resources than we do and have an established reputation and operating history. In addition, certain of our early stage competitors, including A123 Systems, are partnered with, associated with or supported by larger business or financial partners. This may increase their ability to raise capital, attract media attention, develop products and attract customers. Because of their size, resources, reputation and history (or that of their business and financial partners), certain of our competitors may be able to exploit acquisition, development and joint venture opportunities more rapidly, easily or thoroughly than we can. In addition, potential customers may choose to do business with our more established competitors, without regard to the comparative quality of our products, because of their perception that our competitors are more stable, are more likely to complete various projects, are more likely to continue as a going concern and lend greater credibility to any joint venture.

As manufacturing becomes a larger part of our operations, we will become exposed to accompanying risks and liabilities.

In-house and outsourced manufacturing is becoming an increasingly significant part of our business. As a result, we expect to become increasingly subject to various risks associated with the manufacturing and supply of products, including the following:

- If we fail to supply products in accordance with contractual terms, including terms related to time of delivery and performance specifications, we may be required to repair or replace defective products and may become liable for direct, special, consequential and other damages, even if manufacturing or delivery was outsourced;

- Raw materials used in the manufacturing process, labor and other key inputs may become scarce and expensive, causing our costs to exceed cost projections and associated revenues;

- Manufacturing processes typically involve large machinery, fuels and chemicals, any or all of which may lead to accidents involving bodily harm, destruction of facilities and environmental contamination and associated liabilities;

- As our manufacturing operations expand, we expect that a significant portion of our manufacturing will be done overseas, either by third-party contractors or in a plant owned by the company. Any manufacturing done overseas presents risks associated with quality control, currency exchange rates, foreign laws and customs, timing and loss risks associated with overseas transportation and potential adverse changes in the political, legal and social environment in the host county; and

- We have made, and may be required to make, representations as to our right to supply and/or license intellectual property and to our compliance with laws. Such representations are usually supported by indemnification provisions requiring us to defend our customers and otherwise make them whole if we license or supply products that infringe on third-party technologies or violate government regulations.

Any failure to adequately manage risks associated with the manufacture and supply of materials and products could lead to losses (or smaller than anticipated gross profits) from that segment of our business and/or significant liabilities, which would harm our business, operations and financial condition.

Our past and future operations may lead to substantial environmental liability.

Virtually any prior or future production of our nanomaterials and titanium dioxide pigment technology is subject to federal, state and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation and/or removal of any hazardous substances discovered at any property we use. In addition, courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal or transportation of hazardous substances. If we incur any significant environmental liabilities, our ability to execute our business plan and our financial condition would be harmed.

Certain of our experts and directors reside in Canada or China and may be able to avoid civil liability.

We are a Canadian corporation, and a majority of our directors reside outside the United States in Canada or China. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the U.S. securities laws. It is uncertain whether Canadian or Chinese courts would enforce judgments of U.S. courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of U.S. securities laws or impose liability in original actions against us or our directors, officers or experts predicated upon U.S. securities laws.

We are dependent on key personnel.

Our continued success will depend, to a significant extent, on the services of our executive management team and certain key scientists and engineers. We do not have key man insurance on any of these individuals. Nor do we have agreements requiring any of our key personnel to remain with our company. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would harm our business.

We may issue substantial amounts of additional shares without stockholder approval.

Our articles of incorporation authorize the issuance of an unlimited number of common shares that may be issued without any action or approval by our stockholders. In addition, we have various stock option plans that have potential for diluting the ownership interests of our stockholders. The issuance of any additional common shares would further dilute the percentage ownership of our company held by existing stockholders.

The market price of our common shares is highly volatile and may increase or decrease dramatically at any time.

The market price of our common shares is highly volatile. Our stock price may change dramatically as the result of announcements of product developments, new products or innovations by us or our competitors, uncertainty regarding the viability of our technology or our product initiatives, significant customer contracts, significant litigation, our liquidity situation, revenues or losses, or other factors or events that would be expected to affect our business, financial condition, results of operations and future prospects.

The market price for our common shares may be affected by various factors not directly related to our business or future prospects, including the following:

- intentional manipulation of our stock price by existing or future shareholders or a reaction by investors to trends in our stock rather than the fundamentals of our business;
-

a single acquisition or disposition, or several related acquisitions or dispositions, of a large number of our shares, including by short sellers covering their position;

- the interest of the market in our business sector, without regard to our financial condition, results of operations or business prospects;

- positive or negative statements or projections about our company or our industry, by analysts, stock gurus and other persons;

- the adoption of governmental regulations or government grant programs and similar developments in the United States or abroad that may enhance or detract from our ability to offer our products and services or affect our cost structure; and

- economic and other external market factors, such as a general decline in market prices due to poor economic conditions, investor distrust or a financial crisis.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our common shares, our stock price and trading volume could decline.

The trading market for our common shares is influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our common shares adversely, or provide more favorable relative recommendations about our competitors, the price of our common shares would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial market, which in turn could cause the price or trading volume of our common shares to decline.

We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common shares. We currently intend to retain any future earnings, if any, for use in our business and, therefore, do not anticipate paying dividends on our common shares in the foreseeable future.

We are subject to various regulatory regimes, and may be adversely affected by inquiries, investigations and allegations that we have not complied with governing rules and laws.

In light of our status as a public company and our lines of business, we are subject to a variety of laws and regulatory regimes in addition to those applicable to all businesses generally. For example, we are subject to the reporting requirements applicable to Canadian and United States reporting issuers, such as the Sarbanes-Oxley Act of 2002, the rules of the NASDAQ Capital Market and certain state and provincial securities laws. We are also subject to state and federal environmental, health and safety laws, and rules governing department of defense contracts. Such laws and rules change frequently and are often complex. In connection with such laws, we are subject to periodic audits, inquiries and investigations. Any such audits, inquiries and investigations may divert considerable financial and human resources and adversely affect the execution of our business plan.

Through such audits, inquiries and investigations, we or a regulator may determine that we are out of compliance with one or more governing rules or laws. Remedying such non-compliance diverts additional financial and human resources. In addition, in the future, we may be subject to a formal charge or determination that we have materially violated a governing law, rule or regulation. We may also be subject to lawsuits as a result of alleged violation of the securities laws or governing corporate laws. Any charge or allegation, and particularly any determination, that we had materially violated a governing law would harm our ability to enter into business relationships, recruit qualified officers and employees and raise capital.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters is located at 204 Edison Way, Reno, Nevada 89502 in a building we purchased in August 2002. Our nanomaterials assets are located in this building, which contains approximately 85,000 square feet of production, laboratory, testing and office space.

We are party to a lease agreement effective as of July 1, 2007, for 30,000 square feet of space in the Flagship Business Accelerator Building located at 3019 Enterprise Drive, Anderson, Indiana. The space is used for the production of prototype batteries and battery systems. The lease is for an initial term of five years with a single one-year renewal term. On March 1, 2008, we signed an addendum to this lease that increased the space leased by 40,000 square feet and set forth corresponding adjustments in our rent. Total rent to be paid over the five year term including real estate taxes is $1.3 million. In addition to the Flagship lease, we rent another 2,210 square feet of space at 1305 W. 29th Street, Anderson, Indiana, on a month to month basis.

We also maintain a registered office at 360 Bay Street, Suite 500, Toronto, Ontario M5H 2V6. We do not lease any space for, or conduct any operations out of, the Toronto, Ontario registered office.

Item 3. Legal Proceedings.

JMP Dispute. On or about September 9, 2011, JMP Securities LLC ("JMP") filed a complaint against the Company in the United States District Court in the Northern District of California. JMP alleges breach of contract, promissory estoppel, fraud and negligence misrepresentation and seeks damages and punitive damages in an unspecified amount. This dispute arises from JMP's engagement as the Company's financial advisor in July 2010, and the key issue in this dispute is the amount of the fee JMP is entitled to receive as a result of the closing of the common share issuance to an affiliate of Canon. Under governing agreements, the amount of JMP's fee differs depending upon whether the common share issuance is a "Sale or Merger" (defined to include an acquisition of a majority of voting securities of the Company) or whether it is a "Strategic Investment", and whether certain gross up provisions apply. The Company asserts that the correct fee amount is approximately $.8 million, while JMP asserts that the correct fee amount is approximately $2.3 million. The Company filed an answer to JMP's complaint and a motion to dismiss certain, but not all, claims in JMP's complaint, of which a motion is pending.

Charles Cheng Fee Dispute. On or about October 12, 2011, Altairnano filed a complaint against Zhiyuan (Charles) Cheng in the United States District Court in the Northern District of Nevada. Altairnano seeks a declaratory judgment that it owes Mr. Cheng no fee and seeks damages for breach of contract in an unspecified amount. The dispute arises from Mr. Cheng's engagement as a consultant to seek customers and strategic partners for Altairnano in China. Mr. Cheng has asserted in various communications that his efforts were significant in the arranging of the common share issuance with Canon and that, as a result, he is entitled to a $1.7 million fee in consideration of the closing of such transaction. Altairnano claims that Mr. Cheng is entitled to no fee, and that Altairnano is entitled to damages, as a result of Mr. Cheng's numerous breaches of material provisions of the agreement. Altairnano has filed the complaint, and Mr. Cheng has filed an answer denying key allegations of the complaint and a counterclaim seeking payment of the fee, and damages, under various theories. Mr. Cheng has joined Zhuhai Yintong Energy Company Ltd. (“YTE”) and Wei Yincang into the action by means of a complaint against them alleging a breach of an agreement between them and Mr. Cheng.

These disputed amounts are directly related to the Share Subscription Agreement with Canon. Management recorded a $4 million charge for these disputed amounts included in stock issuance costs within Equity.

Item 4. Mining Safety Disclosures.

None.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Price

Our common shares are traded on the NASDAQ Capital Market under the symbol "ALTI." The following table sets forth, during the periods indicated, the high and low sales prices for our common shares, as reported on our principal trading market. All market prices have been adjusted to reflect the reverse stock split completed in November 2010.

Fiscal Year Ended December 31, 2011	Low	High
1st Quarter	$ 1.55	$ 3.32
2nd Quarter	$ 0.84	$ 1.68
3rd Quarter	$ 0.72	$ 1.74
4th Quarter	$ 0.63	$ 1.48
Fiscal Year Ended December 31, 2010	Low	High
1st Quarter	$ 2.80	$ 3.84
2nd Quarter	$ 1.20	$ 3.12
3rd Quarter	$ 1.32	$ 3.24
4th Quarter	$ 1.72	$ 2.89

The last sale price of our common shares, as reported on the NASDAQ Capital Market on March 27, 2012, was $.66 per share.

Outstanding Shares and Number of Shareholders

As of March 27, 2012, the number of common shares outstanding was 69,452,487 held by approximately 403 holders of record. In addition, as of the same date, we have reserved 5,303,942 common shares for issuance upon exercise of options that have been, or may be, granted under our employee stock option plans and 2,476,654 common shares for issuance upon exercise of outstanding warrants.

Dividends

We have never declared or paid cash dividends on our common shares. Moreover, we currently intend to retain any future earnings for use in our business and, therefore, do not anticipate paying any dividends on our common shares in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

We have stock option plans administered by the Compensation Committee of our Board of Directors that provide for the granting of options to employees, officers, directors and other service providers of the Company. Security holders have approved all option plans. The following table sets forth certain information with respect to compensation plans under which equity securities are authorized for issuance at December 31, 2011:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	1,564,824	5.58	5,303,942
Equity compensation plans not approved by security holders	None	N/A	None
Total	1,564,824	5.58	5,303,942

Of the total 5,303,942 securities remaining available for future issuance, only 303,942 are subject to an effective Registration Statement on Form S-8. The Board of Directors has not authorized the filing of a Form S-8 with respect to the 5,000,000 added to the plan in 2011 and, as a result, our ability to grant options or other awards with respect to such shares is severely restricted.

Recent Sales of Unregistered Securities

We did not sell any securities in transactions that were not registered under the Securities Act in the quarter ended December 31, 2011.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common shares is Equity Transfer Services, Inc., 200 University Ave, Suite 400, Toronto, Ontario, M5H 4H2.

Certain Canadian Federal Income Tax Considerations

Dividends paid on our common shares which are owned by non-residents of Canada (for purposes of the Income Tax Act (Canada)(the "Tax Act")(a "Non-Resident") will be subject to Canadian withholding tax generally at the rate of 25%. However, Article X of the Canada -United States Income Tax Convention (1980), as amended, (the "Treaty") generally limits the rate of withholding tax on dividends paid to United States residents to 15%. The Treaty further limits the rate of withholding tax to 5% if the beneficial owner of the dividends is a U.S. company that owns at least 10% of the voting shares of the Company.

A capital gain realized on the disposition of our common shares by a Non-Resident will generally not be subject to tax under the Tax Act provided the shares are not "taxable Canadian property" of the Non-Resident. In general, our common shares will not be taxable Canadian property of a Non-Resident at a particular time provided that: (i) such shares are listed on a "designated stock exchange" (which currently includes NASDAQ) for the purposes of the Tax Act at the time of disposition; and (ii) at no time during the 60 month period immediately preceding the disposition of such shares were 25% or more of the issued shares of any class or series of the our capital stock owned by the Non-Resident, by persons with whom the Non-Resident did not deal at arm's length, or by the Non-Resident together with such persons.

This summary is of a general nature only and is not intended to be, nor shall be construed to be, legal or tax advice to any particular Non-Resident. Accordingly, Non-Resident holders of our common shares are urged to consult their own tax advisors for advice with regard to their particular circumstances.

Item 6. Selected Financial Data.

The following table sets forth selected consolidated financial information with respect to the Company and its subsidiaries for the periods indicated. The data is derived from financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The selected financial data should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes included herein. All amounts are stated in thousands of U.S. dollars.

For the Year Ended December 31,	2011	2010	2009	2008	2007
STATEMENTS OF OPERATIONS					
Revenues	$ 5,226	$ 7,830	$ 4,371	$ 5,726	$ 9,108
Operating expenses	(20,480)	(22,482)	(22,116)	(33,202)	(42,176)
Interest expense	(156)	(19)	(107)	(97)	(134)
Interest income	-	101	188	982	1,101
Realized (loss)/gain on investment	-	(2,045)	851	(89)	-
Realized gain on warrants	1,274	-	-	-	-
Loss from continuing operations before non-controlling interest's share	(19,933)	(22,291)	(21,931)	(29,340)	(32,102)
Non-controlling interest's share	-	5	619	272	631
Net loss	(19,933)	(22,286)	(21,312)	(29,068)	(31,471)
Basic and diluted net loss per common share	(0.43)	(0.84)	(0.85)	(1.35)	(1.80)
Cash dividends declared per common share	-	-	-	-	-
BALANCE SHEET DATA					
Working capital	46,253	8,161	22,118	26,067	39,573
Total assets	63,532	24,260	40,317	48,071	73,859
Current liabilities	(10,059)	(6,946)	(4,055)	(3,647)	(14,329)
Long-term obligations	-	(16)	(37)	(608)	(1,200)
Non-controlling interest in subsidiary	-	-	(541)	(1,098)	(1,369)
Net shareholders' equity	$ (53,473)	$ (17,298)	$ (35,684)	$ (42,718)	$ (56,961)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto.

Overview

We are a Canadian corporation, with principal assets and operations in the United States, whose primary business is developing, manufacturing and selling our nano-lithium titanate battery cells, batteries and battery systems and providing related design, installation and test services. Our primary focus is marketing our large-scale energy storage solutions to power companies and electric grid operators throughout the world. In addition, we market our batteries to electric and hybrid-electric bus manufacturers, and are working to expand into new industrial markets.

Starting in 2010 we began looking at additional opportunities to expand the application of our battery technology into various industrial markets that have a need for the attributes of our battery technology. We believe that in the aggregate, our target markets are multi-billion dollar emerging markets with room for a number of successful suppliers. At the present time, we perceive no dominant provider and we believe that as a result of our significant differentiated product attributes, the overall strength of our management team, and the recognition we are receiving in the marketplace, that we have a very good chance of becoming one of the successful suppliers. Our proprietary technology platform gives our products a number of unique, highly sought after attributes that clearly differentiate our products from their alternatives. Included in these attributes are substantially longer cycle and calendar lives, a rapid recharge time, the ability to provide instantaneous high power, a wide operating temperature range and increased operational safety.

Our historical revenues have been generated by license fees, product sales, commercial collaborations, and government contracts and grants. We expect future revenues to consist primarily of product sales. We currently have agreements in place to (1) develop a suite of energy storage solutions for the stationary power market, (2) provide battery modules to a U.S. based bus manufacturer and are negotiating agreements to develop battery modules for various other industrial applications, (3) supply a one-megawatt ALTI-ESS energy storage system for a test of wind energy integration and (4) supply our nano lithium titanate powder to an early stage Chinese battery manufacturer affiliated with Canon (although deliveries under such agreement are suspended and expect to remain suspended in the foreseeable future); we have also sold a battery system and battery cells under this agreement.

In 2012, we plan to form one or more Wholly Foreign Owned Enterprises ("WFOE") in China. In 2012, our Board of Directors approved a business plan that included the expansion of business activities into China. We anticipate this expansion will allow us to participate in the fast-growing China market. We have decided to consolidate our operations, including closing our Reno, NV Corporate Headquarters and combining its corporate functions with our Anderson, IN facility, for greater efficiency and cost reductions.

General Outlook

We have generated net losses in each fiscal year since incorporation. Revenues from product sales increased from $3.5 million in 2010 to $4.6 million in 2011, as a result of continued sales to Proterra and increased sales to YTE. Commercial collaborations, contracts and grants decreased $3.9 million from $4.3 million in 2010 to $367,000 in 2011, as we wrapped up U.S. Army Nanosensor grant work. As a condition to closing the Canon investment we have had to abandon all future military business. We completed our contract with the U.S. Office of Naval research and most of our nanosensor grant during 2010.

Our current focus is on the development of products in energy storage that we anticipate will eventually bring a substantial amount of higher-margin revenues from product sales. We expect our nano lithium titanate batteries and battery systems to be the source of such higher-margin revenues.

As we attempt to significantly expand our revenues from licensing, manufacturing and other sources, some of the key near-term events that will affect our long-term success prospects include the following:

- Based on the success of the 2008 AES 2 megawatt frequency regulation trial, as validated in the KEMA, Inc. analysis and report, we have experienced a substantial amount of interest in our large scale battery systems from other entities and are in active sales development discussions with a number of them. In 2011, we accepted purchase orders to supply the University of Hawaii - Hawaii Natural Energy Institute ("HNEI") with two 1 megawatt ALTI-ESS energy storage system for a test of wind and solar energy integration. We anticipate shipping one of these systems in the third quarter of 2012 and the other in the fourth quarter of 2012. On February 9, 2011, we also signed a contract with Inversiones Energéticas, S.A. de C.V. ("INE") for the supply and installation of a ten megawatt ALTI-ESS advanced battery system in El Salvador. Total revenues under the Contract are $18 million to be recognized over an expected 14-month period following Altair's receipt of the notice to proceed. We anticipate receiving this notice to proceed during the second quarter of 2012. Under the Contract, we are responsible for virtually all of the design, supply, labor, installation and commission of the advanced battery system. We will provide a one-year warranty for the entire system and an additional two-year warranty for the batteries and control system. This project was delayed in 2011 as a result of obtaining necessary regulatory approvals to enable energy storage on the El Salvador electric grid. We believe necessary regulatory approvals will be received in the second quarter of 2012 permitting the project to move forward.

- In June 2010, we signed a contract with Proterra, LLC, a Golden, Colorado based leading designer and manufacturer of heavy-duty drive systems, energy storage systems, vehicle control systems and transit buses to sell them battery modules for their all-electric and hybrid-electric buses. Proterra's systems are scalable to all forms of commercial buses and Class 6-8 trucks. During 2010 we sold $2.4 million of battery modules to Proterra. In 2011 we sold $2.1 million of battery modules to Proterra. We do not expect to sell additional battery modules to Proterra during 2012 as they work through their inventory of battery modules. We anticipate battery module sales to expand to Proterra in 2013 and future years as they gradually scale up their business.

- Based on the demonstrated success of our battery in the Proterra bus application, we have also entered into discussions with a number of other bus manufacturers or systems integrators regarding joint development products or purchases of our battery products for transportation applications.

- We are in discussions with a number of industrial manufacturers of forklifts, elevators and other electric equipment whose use requires the long-life, rapid recharge, extreme operating temperature range or other differentiating attributes of our battery technology.

Although it is not essential that all of these markets become successful for our battery technology in order to permit substantial long-term revenue growth, we believe that full commercialization of several of our battery applications will be necessary in order to expand our revenues enough to create a likelihood of our becoming profitable in the long-term. We remain optimistic with respect to our current key projects, as well as others we are pursuing, but recognize that, with respect to each, there are development, marketing, partnering and other risks to be overcome.

Liquidity and Capital Resources

Current and Expected Liquidity

As of December 31, 2011, we had cash totaling $46.5 million. Net cash used in operating activities for the year ended December 31, 2011 totaled $14.7 million compared to $15.2 million for the year ended December 31, 2010. The decrease in cash used in operating activities for 2011 compared to 2010 was due in part primarily to an increase in trade account payables $3.0 million, mostly the result of two outstanding and disputed vendor payments, offset by a decrease in deferred revenues of $0.9 million in part from YTE product shipments made in 2011.

Investing activities for the year ended December 31, 2011 reflect the purchase of property and equipment totaling $604,000.

Our cash and short-term investments increased by $41.8 million, from $4.7 million at December 31, 2010 to $46.5 million at December 31, 2011, due primarily to the Canon investment of $57.5 million, offset by cash used in operations of $14.7 million. On March 30, 2011 we issued common shares and warrants to purchase common shares for net proceeds of $5.7 million. We initially recorded a $1.9 million warrant liability related to this capital raise and adjusted this warrant liability's fair value down to $0.7 million as of December 31, 2011. We also received net cash proceeds of $1.4 million on a note payable secured by our Reno, NV facility during April 2011. During the nine months ending September 30, 2010 we made the last $600,000 payment on our original Reno building mortgage. In relation to the Canon investment, we are required to pay a placement agent fee of between $828,000 and $2.15 million, the amount of which is subject to pending litigation, and we are disputing an additional claimed finder's fee of $1.7 million, which is also subject to pending litigation. See Part I, Item 3. Legal Proceedings.

The net source of cash from financing activities of $57.1 million for the year ended December 31, 2011 primarily reflects the issuance of common shares, net of issuance costs, for $57.8 million. The difference of $.7 million relates to a net decrease in notes payable and warrants redeemed. On March 30, 2011 we issued common shares and warrants to purchase common shares for net proceeds of $5.7 million. We initially recorded a $1.9 million warrant liability related to this capital raise and adjusted this warrant liability's fair value down to $0.7 million as of December 31, 2011. We also received net cash proceeds of $1.4 million on a note payable secured by our Reno, NV facility during April 2011. During the nine months ending September 30, 2010 we made the last $600,000 payment on our original Reno building mortgage.

In 2011, Energy Storage Technology (China) Group Limited, an indirect subsidiary of Canon, purchased 37,036,807 shares for $57.5 million. These proceeds are available to support continuing operations and to invest in manufacturing and product sales efforts in China. We are currently evaluating manufacturing and product market opportunities in China and expect a significant portion of the proceeds received from Canon will be used to capitalize a wholly foreign owned entity, or WFOE, in China. Because of legal limitations on the repatriation of funds used to capitalize a WFOE, if a significant portion of available funds are invested in China, we would likely need to raise capital or obtain financing in 2012 to fund our China expansion as well as sustain our U.S. operations. We plan to retain funds in our U.S. operations sufficient to fund U.S. operations, prior to sending any funds to China.

We evaluate our capital needs and the availability of capital on an ongoing basis and, consistent with past practice, expect to seek capital when and on such terms as we deem appropriate based upon our assessment of our current liquidity, capital needs and the availability of capital. Given that we are not yet in a positive cash flow or earnings position, the options available to us are fewer than to a positive cash flow company. Specifically, we would not generally qualify for long-term institutional debt financing. Consistent with past practice we expect to raise additional capital through the sale of common shares, convertible notes, stock options, and warrants. We do not expect the current economic environment to preclude our ability to raise capital, but the overall cost to the Company of doing so will most likely be high.

To the extent we expect shortages in capital and do not have significant order volume, purchases of raw materials would be discontinued and other measures to conserve cash would be implemented as necessary to extend cash availability. Other measures to preserve cash on hand as required would include the following:

§ reducing production levels;
§ deferring discretionary expenditures such as capital purchases, internal research costs, training, and routine equipment and building maintenance;
§ eliminating or deferring the filling of non-critical positions through attrition; and
§ reductions in workforce.

Over the long-term, we anticipate substantially increasing revenues by entering into new contracts and increasing product sales in the stationary power, electric bus and selected other industrial markets. However, this increase in revenues will be dependent on our ability to transition our stationary power products from prototypes into commercial grade products. During 2011, we continued making significant expenditures for our battery initiative, with our existing staff and some new equipment for the manufacture of nano lithium titanate products and increased our sales and marketing efforts. In 2012, we intend to increase the 2011 level of spending on our battery initiatives by continuing the enhancement of our products and their conversion into commercial grade products.

Capital Commitments and Expenditures

The following table discloses aggregate information about our contractual obligations and the periods in which payments are due as of December 31, 2011:

In thousands of dollars Contractual Obligations	Total	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
Notes Payable	$ -	$ -	$ -	$ -	$ -
Interest on Notes Payable	-	-	-	-	-
Contractual Service Agreements	867	867	-	-	-

Capital Leases	16	16		-	-
Operating Leases	149	149	-	-	-
Unfulfilled Purchase Orders	1,557	1,557	-	-	-
Total Contractual Obligations	$ 2,590	$ 2,590	$ -	$ -	$ -

Off-Balance Sheet Arrangements

The company did not have any off-balance sheet transactions during 2011.

Results of Operations

The following table sets forth certain selected, unaudited, condensed consolidated financial data for the periods indicated.

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Expressed in thousands of United States Dollars)
(Unaudited)

	Power and Energy Group Twelve Months Ended December 31,			All Other Twelve Months Ended December 31,			Consolidated Twelve Months Ended December 31,		
	2011	2010	2009	2011	2010	2009	2011	2010	2009
Revenues									
Product sales	$ 4,542	$ 3,232	$ 636	$ 77	$ 311	$ 309	$ 4,619	$ 3,543	$ 945
Less: Sales returns	-	-	(113)	-	-	(71)	-	-	(184)
License fees	-	-	-	240	-	750	240	-	750
Commercial collaborations	77	322	1,405	3	42	5	80	364	1,410
Contracts and grants	(116)	2,602	1,321	403	1,321	129	287	3,923	1,450
Total revenues	4,503	6,156	3,249	723	1,674	1,122	5,226	7,830	4,371
Cost of goods sold									
Product	5,129	2,589	915	20	73	39	5,149	2,663	954
Commercial collaborations	73	180	781	-	14	-	73	194	781
Contracts and grants	-	1,504	1,039	296	1,031	81	296	2,534	1,120
Warranty and inventory reserves	279	409	198	-	-	-	279	409	198
Total cost of goods sold	5,481	4,682	2,933	316	1,118	120	5,797	5,800	3,053
Gross (loss) profit	(978)	1,474	316	407	556	1,002	(571)	2,030	1,318
Operating expenses									
Research and development	6,700	7,859	9,295	260	353	94	6,960	8,212	9,389
Sales and marketing	3,603	4,051	2,894	-	-	-	3,603	4,051	2,894
General and administrative	7,669	7,456	7,796	-	97	2	7,669	7,553	7,798
	1,248	1,680	1,504	76	216	531	1,324	1,896	2,035

Depreciation and amortization									
Loss on diposal of assets	924	770	-	-	-	-	924	770	-
Total operating expenses	20,144	21,816	21,489	336	666	627	20,480	22,482	22,116
(Loss) gain from operations	(21,122)	(20,342)	(21,173)	71	(110)	375	(21,051)	(20,452)	(20,798)
Other income (expense)									
Interest expense	(156)	(19)	(107)	-	-	-	(156)	(19)	(107)
Interest income	-	101	188	-	-	-	-	101	188
Realized (loss) gain on investment	-	(1,950)	(18)	-	(95)	869	-	(2,045)	851
Realized gain on warrants	1,274	-	-	-	-	-	1,274	-	-
Total other (expense) income, net	1,118	(1,868)	63	-	(95)	869	1,118	(1,963)	932
(Loss) gain from continuing operations	(20,004)	(22,210)	(21,110)	71	(205)	1,244	(19,933)	(22,415)	(19,866)
Gain (loss) from discontinued operations	-	-	-	-	124	(2,065)	-	124	(2,065)
Net loss (income)	(20,004)	(22,210)	(21,110)	71	(81)	(821)	(19,933)	(22,291)	(21,931)
Less: Net loss attributable to noncontrolling interests	-	-	-	-	5	619	-	5	619
Net loss attributable to Altair Nanotechnologies Inc.	$ (20,004)	$ (22,210)	$ (21,110)	$ 71	$ (76)	$ (202)	$ (19,933)	$ (22,286)	$ (21,312)
Amounts attributable to Altair Nanotechnologies Inc. shareholders:									
(Loss) gain from continuing operations	$ (20,004)	$ (22,210)	$ (21,110)	$ 71	$ (205)	$ 1,244	$ (19,933)	$ (22,415)	$ (19,866)
Gain (Loss) from discontinued	-	-	-	-	129	(1,446)	-	129	(1,446)

operations									
Net (loss) gain	$ (20,004)	$ (22,210)	$ (21,110)	$ 71	$ (76)	$ (202)	$ (19,933)	$ (22,286)	$ (21,312)

Fiscal Year 2011 vs. 2010

Revenues

Power and Energy Group product sales increased $1.3 million from $3.2 million in 2010 to $4.5 million in 2011. This was due primarily to the $1.8 million sale of LTO, battery cells and a one-megawatt battery system to a Chinese company in early 2011. Power and Energy Group contracts and grants revenue decreased $2.7 million from $2.6 million in 2010 to ($.1) million in 2011, as we completed our contract with the U.S. Office of Naval Research in 2010. All Other contracts and grants revenue decreased by $918,000 from 1.3 million in 2010 to $403,000 in 2011. This decrease resulted primarily from the completion of our U.S. Army nanosensor contract in mid-2011. All Other License fees increased $240,000 from zero in 2010 to $240,000 in 2011, from license revenue associated with technology licensed to AlSher Titania, LLC. Power and Energy Commercial Collaborations decreased $245,000 from $322,000 in 2010 to $77,000 in 2011, primarily due to Proterra moving from a commercial collaboration contract to a product revenue contract in 2011.

Cost of Goods Sold ("COGS")

Product COGS in the Power and Energy Group product COGS increased from 80% of revenue in 2010 to 113% of revenue in 2011. This increase was due primarily from the sale of product at a reduced price to a Chinese company to enable us to secure our initial order from China. In addition we recorded a $264,000 inventory reserve as of December 31, 2011 for battery cell quality issues.

Our product gross margins have been, and are expected to be low during 2012. As we expand our production volume along with customer demand, and assuming that we shift certain aspects of our manufacturing to China, where we expect to experience lower costs, we expect our production costs to come down, which should result in higher product gross margins.

Operating Expenses

Power and Energy Group research and development expenses decreased $1.2 million or 15% from $7.9 million in 2010 to $6.7 million in 2011 due to cost reductions in the business. We performed less research in our battery business as our products mature and focused more on product development from our existing technology.

Consolidated sales and marketing costs decreased $448,000 or 11% from 2010 to 2011 as we emphasized cost reduction throughout our business during 2011.

Total general and administrative costs were up $116,000 or 2% from 2010 to 2011 primarily from employee severance costs associated with our departed CEO and CFO and due to the expense related to stock option accelerated vesting for officers and directors resulting from the change in control equity financing in July 2011.

Power and Energy Group loss on disposal of assets of $924,000 in 2011 related to the impairment of specified equipment in our Reno, Nevada corporate headquarters that will no longer be used due to our planned shift of LTO manufacturing to China.

Other Income and Expense

Other income realized gain on warrants increased $1.3 million from zero in 2010 to $1.3 million in 2011, due to the change in fair value of the warrant liabilities issued during 2011.

Net Loss

Overall net loss decreased $2.4 million from $22.3 million in 2010 to $19.9 million in 2011 primarily due to a decrease in overall operating expenses of $2 million, a $2 million realized loss on the sale of auction rate securities in 2010, a $1.3 million realized gain on warrants during 2011, all offset by a reduction of $2.6 million in gross profit from 2010 to 2011.

Fiscal Year 2010 vs. 2009

Revenues

Total revenues for the year ended December 31, 2010 were $7.8 million, up 79% from $4.4 million for 2009. Power and Energy Group revenue increased $3.0 million from $3.2 million in 2009 to 6.2 million in 2010. This was due primarily to $2.0 million of increased battery module sales to Proterra and a $1.4 million increase in revenue from our Office of Naval Research (ONR) contract, offset by $744,000 in non-recurring revenues in 2009 with BAE Systems. The ONR contract was completed as of December 31, 2010.

All Other contracts and grants revenue increased $1.2 million from $129,000 in 2009 to $1.3 million in 2010 due to our U.S. Army nanosensor contract.

Cost of Goods Sold (“COGS”)

Product COGS in the Power and Energy Group increased from $915,000 in 2009 to $2.6 million in 2010 primarily from increased battery module sales to Proterra. Commercial collaborations COGS in the Power and Energy Group dropped from $781,000 in 2009 to $180,000 in 2010 due primarily to the nonrecurring contract with BAE Systems during 2009. Contract and grants COGS in the Power and Energy Group increased from $1 million in 2009 to $1.5 million in 2010 related primarily to the $1.4 million increase in revenue from our Office of Naval Research contract.

All Other contracts and grants COGS increased from $81,000 in 2009 to $1 million in 2010 due to our U.S. Army nanosensor contract.

Operating Expenses

Total research and development expenses decreased $1.2 million or 13% from $9.4 million in 2009 to $8.2 million in 2010. Power and Energy Group research and development expenses decreased $1.1 million from $9.3 million in 2009 to $7.9 million in 2010. Both trends were due to the transfer of more costs to cost of goods sold that directly related to our Office of Naval Research and U.S. Army nanosensor contracts.

Total sales and marketing expenses increased $1.2 million or 40% from 2009 to 2010 as the result of our effort to enhance our sales penetration into our target markets of electricity generation and distribution and electric buses.

Total general and administrative costs were down $244,000 or 3% from 2009 to 2010 as the result of our focus on company-wide cost controls.

Loss on disposal of assets of $770,000 during 2010 resulted from the early retirement of various production and research and development-related assets no longer used in our Power and Energy Group.

Other Income and Expense

The $2 million realized loss on investments during 2010 resulted primarily from the sale of our auction rate securities ($1.95 million).

Net Loss

Overall net loss of $22.3 million in 2010 versus the overall net loss of $21.3 million during 2009 was the result of our transitions in 2010 described above. Overall this transition consisted of eliminating our defense and performance materials businesses as we focused on growing our Power and Energy Group business.

Critical Accounting Policies and Estimates

Management based the preceding discussion and analysis of our financial condition and results of operations on our consolidated financial statements. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our critical accounting policies and estimates, including those related to long-lived assets, share-based compensation, revenue recognition, overhead allocation, allowance for doubtful accounts, inventory, and deferred income tax. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements. These judgments and estimates affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting periods. Changes to these judgments and estimates could adversely affect the Company's future results of operations and cash flows.

Accounts Receivable — Accounts receivable consists of amounts due from customers for services and product sales, net of an allowance for doubtful accounts. We determine the allowance for doubtful accounts by reviewing each customer account and specifically identifying any potential for loss.

Inventory – We value our inventories generally at the lower of cost (first-in, first-out method) or market. We employ a full absorption procedure using standard cost techniques. The standards are customarily reviewed and adjusted every three months. Overhead rates are recorded to inventory based on normal capacity. Any idle facility costs or excessive spoilage are recorded as current period charges. As of December 31, 2011 we recorded a $264,000 inventory valuation allowance due to quality issues with one of our cell suppliers. As of December 31, 2010, we recorded a $623,000 inventory valuation allowance due to quality issues with our cell supplier, of which $541,000 was recorded as a receivable from our vendor covered under their product warranty, which was resolved in 2011.

Research and Development Expenditures — The costs of materials, equipment, or facilities that are acquired or constructed for a particular research and development project and that have no alternative future uses (in other research and development projects or otherwise) are expensed as research and development costs at the time the costs are incurred. Research and development expenditures related to materials and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses (in research and development projects or otherwise) are capitalized when acquired or constructed. Research and development expenditures, which include the cost of materials consumed in research and development activities, salaries, wages and other costs of personnel engaged in research and development, costs of services performed by others for research and development on our behalf and indirect costs are expensed as research and development costs when incurred.

Stock-Based Compensation — We measure the cost of services received in exchange for an award of equity instruments based on the grant-date fair value of the award. That cost is recognized over the period during which services are provided in exchange for the award, known as the requisite service period (usually the vesting period).

Long-Lived Assets — We evaluate the carrying value of long-lived assets whenever events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. The carrying value of a long-lived asset is considered impaired when the total projected undiscounted cash flows expected to be generated by the asset are less than the carrying value. Our estimate of the cash flows is based on the information available at the time including the following: internal budgets; sales forecasts; customer trends; anticipated production volumes; and market conditions over an estimate of the remaining useful life of the asset which may range from 3 to 10 years for most equipment and up to 22 years for our building and related building improvements. If an impairment is indicated, the asset value is written down to its fair value. Events or circumstances that could indicate the existence of a possible impairment include obsolescence of the technology, an absence of market demand for the product or the assets used to produce it, a history of operating or cash flow losses and/or the partial or complete lapse of technology rights protection.

As of December 31, 2011, we estimate that our future cash flows, on an undiscounted basis, are greater than our $7.2 million investment in long-lived assets. Our estimated future cash flows include anticipated product margins and commercial collaborations, since our long-lived asset base, which is primarily composed of production, laboratory and testing equipment is utilized to fulfill customer contracts in all revenue categories.

Management evaluates the carrying value and useful lives of its long-lived assets annually. In 2011, the long-lived assets on hand were evaluated for their future use. Assets with a net book value of $924,000 were impaired as of December 31, 2011.

In the first quarter of 2010, we reviewed our four capitalized patents and determined that three of these patents had value in excess of their net book value of $483,000 at that time. In the first quarter, we determined that the fourth patent no longer had value. The fourth patent had an original cost of $152,000, accumulated depreciation of $105,000 and a net value of $47,000. Accordingly, an impairment charge of $47,000 was recorded, and is reflected for the twelve months ended December 31, 2010.

We reviewed the remaining three capitalized patents and show a net weighted average value of $350,000 and $426,000, at December 31, 2011 and 2010, respectively. AlSher currently has an exclusive license to use this technology from Altair.

Property, plant and equipment held and used are stated at cost less accumulated depreciation. Depreciation is recorded using the straight-line method over the following useful lives:

Furniture and office equipment	3–7 years
Vehicles	5 years
Nanoparticle production equipment	5–10 years
Building and improvements	30 years

Patents related to the nanoparticle production technology are carried at cost and amortized on a straight-line basis over their estimated useful lives, for a weighted average amortization period of 16.7 years.

Revenue Recognition — We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or service has been performed, the fee is fixed and determinable, and collectability is reasonably assured. Our revenues were derived from product sales, commercial collaborations and contracts and grants. Revenue from product sales is recognized upon delivery of the product, unless specific contractual terms dictate otherwise. Based on the specific terms and conditions of each contract/grant, revenues are recognized on a time and materials basis, a percentage of completion basis and/or a completed contract basis. Revenue under contracts based on time and materials is recognized at contractually billable rates as labor hours and expenses are incurred. Revenue under contracts based on a fixed fee arrangement is recognized based on various performance measures, such as stipulated milestones. As these milestones are achieved, revenue is recognized. From time to time, facts develop that may require us to revise our estimated total costs or revenues expected. The cumulative effect of revised estimates is recorded in the period in which the facts requiring revisions become known. The full amount of anticipated losses on any type of contract is recognized in the period in which it becomes known. Payments received in advance relating to the future performance of services or deliveries of products are deferred until the performance of the service is complete or the product is shipped. Upfront payments received in connection with certain rights granted in contractual arrangements are deferred and revenue is recognized over the related time period in which the benefits are received.

Accrued Warranty — We provide a limited warranty for battery packs and energy storage systems. A liability is recorded for estimated warranty obligations at the date products are sold. Since these are new products, the estimated cost of warranty coverage is based on cell and module life cycle testing and compared for reasonableness to warranty rates on competing battery products. As sufficient actual historical data is collected on the new product, the estimated cost of warranty coverage will be adjusted accordingly. The liability for estimated warranty obligations may also be adjusted based on specific warranty issues identified.

Net Loss per Common Share — Basic loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted loss per share is computed using the weighted average number of common and potentially dilutive shares outstanding during the period. Potentially dilutive shares consist of the incremental common shares issuable upon the exercise of stock options and warrants. Potentially dilutive shares are excluded from the computation if their effect is anti-dilutive. We had a net loss for all periods presented herein; therefore, none of the stock options and warrants outstanding during each of the periods presented were included in the computation of diluted loss per share as they were anti-dilutive. Stock options and warrants to purchase was a total of 4,041,478 shares as of December 31, 2011, 3,271,138 shares as of December 31, 2010, and 2,987,162 shares as of December 31, 2009 were excluded from the calculations of diluted loss per share for the years ended December 31, 2011, 2010 and 2009, respectively.

Income Taxes — The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of the Company's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and the Company's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. Deferred tax assets for which no valuation allowance is recorded may not be realized upon changes in facts and circumstances, resulting in a future charge to establish a valuation allowance.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

Fair Value of Financial Instruments — Our financial instruments such as cash and cash equivalents and long-term debt, when valued using market interest rates, would not be materially different from the amounts presented in the consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

None.

Item 8. Financial Statements and Supplementary Data.

Supplementary Data

The following Supplementary Financial Information for the fiscal quarters ended March 31, June 30, September 30 and December 31 in each of the years 2011 and 2010 was derived from our unaudited quarterly consolidated financial statements filed by us with the SEC in our Quarterly Reports on Form 10-Q with respect to such periods (except for 4th quarter data).

Supplementary Financial Information by Quarter, 2011 and 2010
(Unaudited - in 000s)

	Quarter Ended 3/31	Quarter Ended 6/30	Quarter Ended 9/30	Quarter Ended 12/31
Year Ended December 31, 2011:				
Revenues	$2,551	$476	$855	$1,344
Gross (loss) profit	(234)	(215)	323	(445)
Operating expenses	5,669	3,780	5,419	5,612
Net loss	(5,911)	(3,025)	(5,873)	(5,124)
Loss per common share: (1)				
Basic and diluted	(0.22)	(0.10)	(0.10)	(0.07)
Year Ended December 31, 2010:				
Revenues	$1,192	$1,500	$2,029	$3,109
Gross profit	297	422	545	766
Operating expenses	6,386	5,493	5,847	4,755
Net loss	(6,067)	(4,925)	(5,281)	(6,013)
Loss per common share: (1)				
Basic and diluted	(0.24)	(0.20)	(0.20)	(0.20)

(1) Loss per common share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly loss per common share amounts does not necessarily equal the total for the year.

Financial Statements

The financial statement required by this Item appears on page F-4 of this Report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

The information required by this Item was previously reported.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures. Based on an evaluation required by paragraph (b) of Rule 13a-15 or Rule 15d-15 of the Securities Exchange Act of 1934, as amended, as of December 31, 2011, which is the end of the period covered by this annual report on Form 10-K, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended) are effective.

Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those written policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;

- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America;

- provide reasonable assurance that our receipts and expenditures are being made only in accordance with authorization of our management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our consolidated financial statements.

Internal control over financial reporting includes the controls themselves, monitoring and internal auditing practices and actions taken to correct deficiencies as identified.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2011. Our management's assessment was based on criteria for effective internal control over financial reporting described in "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of our internal control over financial reporting. Our management reviewed the results of its assessment with the Audit Committee of our Board of Directors. Based on this assessment, our management determined that, as of December 31, 2011, we maintained effective internal control over financial reporting.

The effectiveness of our internal control over financial reporting as of December 31, 2011 has been audited by Crowe Horwath LLP, independent registered public accounting firm, as stated in their report, which is included in Part II, Item 8 of this Form 10-K on pages F-1, F-2 and F-3.

Changes in Internal Control Over Financial Reporting. There were no significant changes (including corrective actions with regard to significant deficiencies or material weaknesses) in our internal controls over financial reporting that occurred during the fourth quarter of fiscal 2011 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors and Executive Officers and Corporate Governance.

The information required by this Item is incorporated by reference to the Company's definitive proxy statement to be filed with the SEC.

The Company has adopted a Code of Ethics that applies to the Company's Senior Executive Officers and Financial Officers. A copy of the Company's Code of Ethics is available on the Company's website at www.altairnano.com.

Item 11. Executive Compensation.

The information required by this Item is incorporated by reference to the Company's definitive proxy statement to be filed with the SEC.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item is incorporated by reference to the Company's definitive proxy statement to be filed with the SEC.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item is incorporated by reference to the Company's definitive proxy statement to be filed with the SEC.

Item 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated by reference to the Company's definitive proxy statement to be filed with the SEC.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) Documents Filed

1. Financial Statements. The following Consolidated Financial Statements of the Company and Auditors' Reports are filed as part of this Annual Report on Form 10-K:

- Reports of Independent Registered Public Accounting Firm 2011 – Crowe Horwath LLP
- Consolidated Balance Sheets, December 31, 2011 and 2010
- Consolidated Statements of Operations for Each of the Three Years in the Period Ended December 31, 2011
- Consolidated Statements of Shareholders' Equity and Comprehensive Loss for Each of the Three Years in the Period Ended December 31, 2011
- Consolidated Statements of Cash Flows for Each of the Three Years in the Period Ended December 31, 2011
- Notes to Consolidated Financial Statements

2. Financial Statement Schedule. Not applicable.

3. Exhibits. The information required by this item is set forth on the exhibit index that follows the signature page of this report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ALTAIR NANOTECHNOLOGIES INC.

By:	/s/ H. Frank Gibbard H. Frank Gibbard, President and Chief Executive Officer
Date:	March 30, 2012

POWER OF ATTORNEY AND ADDITIONAL SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the following persons in the capacities and on the dates indicated have signed this Report. Each person whose signature to this Report appears below hereby constitutes and appoints H. Frank Gibbard and Stephen B. Huang, and each of them, as his true and lawful attorney-in-fact and agent, with full power of substitution, to sign on his behalf individually and in the capacity stated below and to perform any acts necessary to be done in order to file all amendments to this Report, and any and all instruments or documents filed as part of or in connection with this Report or the amendments thereto and each of the undersigned does hereby ratify and confirm all that said attorney-in-fact and agent, or his substitutes, shall do or cause to be done by virtue hereof.

Signature	Title	Date
/s/ H. Frank Gibbard H. Frank Gibbard	President, Chief Executive Officer (Principal Executive Officer) and Director	March 30, 2012
/s/ Stephen B. Huang Stephen B. Huang	Chief Financial Officer and Corporate Secretary (Principal Financial and Accounting Officer)	March 30, 2012
/s/ Yincang Wei Yincang Wei	Chairman Of the Board	March 30, 2012
/s/ Alexander Lee Alexander Lee	Director	March 30, 2012
/s/ Frank Zhao Frank Zhao	Director	March 30, 2012
/s/ Hong Guo Hong Guo	Director	March 30, 2012
/s/ Guohua Sun Guohua Sun	Director	March 30, 2012
/s/ Simon Xue Simon Xue	Director	March 30, 2012
/s/ Jun Liu Jun Liu	Director	March 30, 2012
/s/ Liming Zou Liming Zou	Director	March 30, 2012

Exhibit Index

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Page #)
3.1	Articles of Continuance and Certificate of Amendment	Incorporated by reference to the Company’s Quarterly Report on Form 10-Q filed with the SEC on August 3, 2011.**
3.2	Amended and Restated Bylaws	Incorporated by reference to the Company’s Definitive Proxy Statement on Form 14A filed with the SEC on April 29, 2011. **
4.1	Form of Common Stock Certificate	Incorporated by reference to the Company’s Annual Report on Form 10-K filed with the SEC on February 28, 2011.**
4.2	Amended and Restated Shareholder Rights Plan dated October 15, 1999, with Equity Transfer Services, Inc.	Incorporated by reference to the Company’s Current Report on Form 8-K filed with the SEC on November 19, 1999. **
4.2.1	Amendment No. 1 to Shareholders Rights Plan Agreement dated October 6, 2008, with Equity Transfer Services, Inc.	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on October 6, 2008. **
4.2.2	Restated Amendment No. 2 to Amended and Restated Shareholder Rights Plan Agreement with Equity Transfer Services	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on July 25, 2011. **
4.3	Form of Common Share Purchase Warrant re May 2009 Offering	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on May 22, 2009. **
4.4	Form of Series A Common Share Purchase Warrant re March 2011 Offering	Incorporated by reference to the Company’s Current Report on Form 8-K filed with the SEC on March 30, 2011
10.1	Altair International Inc. Stock Option Plan (1996)***	Incorporated by reference to the Company’s Registration Statement on

		Form S-8, File No. 333-33481 filed with the SEC on July 11, 1997.
10.2	1998 Altair International Inc. Stock Option Plan***	Incorporated by reference to the Company's Definitive Proxy Statement on Form 14A filed with the SEC on May 12, 1998. **
10.3	Altair Nanotechnologies Inc. 2005 Stock Incentive Plan (Amended and Restated)***	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the SEC on March 13, 2007. **
10.4	Standard Form of Stock Option Agreement under 2005 Stock Incentive Plan***	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the SEC on March 13, 2007.**
10.5	Standard Form of Stock Option Agreement for Executives under 2005 Stock incentive Plan ***	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on May 8, 2008. **

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Page #)
10.6	Standard Form of Restricted Stock Agreement under 2005 Stock Incentive Plan***	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the SEC on March 13, 2007. **
10.7	Standard Form of Director's Indemnification Agreement***	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on June 20, 2008. **
10.8	Flagship Business Accelerator Tenant Lease dated July 1, 2007 with the Flagship Enterprise Center, Inc.	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC August 9, 2007. **
10.8.1	Amendment to the Flagship Business Accelerator Tenant Lease dated March 1, 2008 with the Flagship Enterprise Center, Inc.	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC on May 8, 2008. **
10.9	Employment Agreement dated April 7, 2008 with John Fallini***	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on April 9, 2008. **
10.10	Employment Agreement dated September 9, 2010 with Robert Pedraza***	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on September 13, 2010. **
10.11	Registration Rights Agreement dated November 29, 2007 with Al Yousuf LLC	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on November 30, 2007. **
10.11.1	Amendment No. 1 to Registration Rights Agreement with Al Yousuf, LLC dated as of September 30, 2008	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on October 6, 2008. **
10.11.2	Amendment No. 2 to Registration Rights Agreement with Al Yousuf, LLC dated August 14, 2009	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on September 4, 2009. **

10.13	Stock Purchase and Settlement Agreement with Al Yousuf, LLC dated as of September 30, 2008	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on October 6, 2008. **
10.14	Employment Agreement dated September 4, 2009 with Bruce Sabacky***	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on September 10, 2009. **
10.15	Employment Agreement dated April 7, 2010 with Terry Copeland***	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on April 9, 2010, File No. 001-12497

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Page #)
10.16	Product Purchase Agreement dated May 4, 2010 with Proterra Inc.	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 6, 2010, File No. 001-12497
10.17	Redemption Agreement dated April 30, 2010 with The Sherwin-Williams Company and AlSher Titania LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 5, 2010, File No. 001-12497
10.18	Definitive Agreement dated April 30, 2010 with The Sherwin-Williams Company and AlSher Titania LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 5, 2010, File No. 001-12497
10.19	License Agreement dated April 30, 2010 with AlSher Titania LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 5, 2010, File No. 001-12497
10.20	Amended and Restated Master Product Purchase Agreement dated June 22, 2010 with Proterra, Inc.	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on June 25, 2010, File No. 001-12497
10.21	Purchase Order No. 3 and Security Agreement dated June 22, 2010 with Proterra, Inc.	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on June 25, 2010, File No. 001-12497
10.22	Share Subscription Agreement dated September 20, 2010 with Canon Investment Holdings Limited	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **
10.22.1	First Amendment to Share Subscription Agreement dated February 16, 2011 with Canon Investment Holdings Limited	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on February 16, 2011. **
10.22.2	Second Amendment to Share Subscription Agreement dated May 17, 2011 with Canon Investment Holdings Limited	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 17, 2011.**

10.22.3	Third Amendment to Share Subscription Agreement dated June 3, 2011 with Canon Investment Holdings Limited	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on June 3, 2011.**
10.22.4	Fourth Amendment to Share Subscription Agreement dated June 20, 2011 with Canon Investment Holdings Limited	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on June 21, 2011.**
10.22.5	Fifth Amendment to Share Subscription Agreement dated July 21, 2011 with Canon Investment Holdings Limited	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on July 25, 2011.**
10.23	Conditional Supply and Technology Licensing Agreement dated September 20, 2010 with Zhuhai Yintong Energy Co. Ltd., a wholly-owned subsidiary of Canon.	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **
10.24	Investor Rights Agreement dated September 20, 2010 with Canon Investment Holdings Limited	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Page #)
10.25	Waiver and Rights Agreement dated September 20, 2010 with Al Yousuf LLC and Canon Investment Holdings Limited	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **
10.26	Employment Agreement dated August 25, 2010 with Dan Voelker***	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **
10.27	Employment Agreement dated August 25, 2010 with Tom Kieffer***	Incorporated by reference to the Quarterly Report on Form 10-Q filed with the SEC on November 4, 2010. **
10.28	2010 Annual Incentive Bonus Plan***	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the SEC on February 28, 2011.**
10.29	Placement Agent Agreement dated March 28, 2011 with JMP Securities LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on March 30, 2011.**
10.30	Form of Securities Purchase Agreement dated March 28, 2011 re March 2011 Offering	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on March 30, 2011.**
10.31	Note Secured by a Deed of Trust dated April 25, 2011	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 2, 2011.**
10.32	Deed of Trust dated April 25, 2011	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 2, 2011.**
10.33	Guaranty dated April 25, 2011 by Altair Nanotechnologies, Inc. and Altair Nano, Inc. for the benefit of Suncrest Homes 30, LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 2, 2011.**
10.34	Hazardous Materials Indemnity Agreement dated as of April 27, 2011 by Altair Nanotechnologies Inc. to Suncrest Homes 30, LLC	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on May 2, 2011.**

10.35	Revised Sales Agreement dated February 9, 2011 with Inversiones Enegeticas, S.A. de C.V.	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC on August 3, 2011.**
10.36.1	INE Extension effective September 9, 2011	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2011.**
10.37	Employment Agreement effective September 18, 2011 with Dr. H. Frank Gibbard	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2011.**
10.38	Employment Agreement effective September 18, 2011 with Stephen B. Huang	Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2011.**

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Page #)
21	List of Subsidiaries*	Incorporated by reference from Item 1 of this report.
23.1	Consent of Crowe Horwath LLP	Filed herewith.
23.2	Consent of Perry- Smith LLP	Filed herewith.
24	Powers of Attorney	Included in the Signature Page hereof.
31.1	Rule 13-14(a)/15d-14a Certification of Chief Executive Officer	Filed herewith.
31.2	Rule 13-14(a)/15d-15a Certification of Chief Financial Officer	Filed herewith.
32.1	Section 1350 Certification of Chief Executive Officer	Filed herewith.
32.2	Section 1350 Certification of Chief Financial Officer	Filed herewith.
101	Attached as Exhibit 101 are the following documents in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2011 and 2010, (ii) Consolidated Statements of Operations for the years ended December 31, 2011, December 31, 2010 and December 31, 2009, (iii) Consolidated Statements of Cash Flows for the years ended December 31, 2011 and December 31, 2010 and (iv) Consolidated Statements of Stockholders' Equity for the period from January 1, 2009 to December 31, 2011, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text. As provided in Rule 406T of Regulation S-T, this information is furnished and not filed for purpose of Sections 11 and 12 of the Securities Act and Section 18 of the	Filed herewith.

Exchange Act.

*Portions of this Exhibit have been omitted pursuant to Rule 24b-2, are filed separately with the SEC and are subject to a confidential treatment request.

** SEC File No. 1-12497.

*** Indicates management contract or compensatory plan or arrangement.

Altair Nanotechnologies Inc.
and Subsidiaries

Consolidated Financial Statements as of December 31, 2011
and 2010 and for Each of the Three Years in the Period Ended
December 31, 2011 and Reports of the Independent Registered
Public Accounting Firms

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Altair Nanotechnologies Inc.
Reno, Nevada

We have audited the accompanying balance sheet of Altair Nanotechnologies Inc. and subsidiaries (the "Company") as of December 31, 2011, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for the year then ended. We also have audited the Company's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
(continued)

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2011, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ Crowe Horwath LLP

Sacramento, California
March 30, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Altair Nanotechnologies Inc.
Reno, Nevada

We have audited the accompanying consolidated balance sheet of Altair Nanotechnologies Inc. and subsidiaries (the "Company") as of December 31, 2010, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the two years in the period ended December 31, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provided a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Altair Nanotechnologies Inc. and subsidiaries as of December 31, 2010, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. The Company has incurred recurring losses from operations resulting in an accumulated deficit of $184,490,000 at December 31, 2010. Additionally, the Company experienced $15,172,000 in negative cash flows from operations during the year ended December 31, 2010, resulting in a cash balance of $4,695,000 at December 31, 2010. This raises substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Perry-Smith, LLP

Sacramento, California
February 25, 2011

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Expressed in thousands of United States Dollars, except shares)

	December 31, 2011	December 31, 2010
ASSETS		
Current assets		
Cash and cash equivalents	$46,519	$4,695
Accounts receivable, net	333	1,318
Product inventories, net	7,220	6,825
Prepaid expenses and other current assets	2,240	2,269
Total current assets	56,312	15,107
Property, plant and equipment, net	6,870	8,727
Patents, net	350	426
Total Assets	$63,532	$24,260
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Trade accounts payable	$5,870	$2,873
Accrued salaries and benefits	1,132	743
Accrued warranty	354	211
Accrued liabilities	421	387
Deferred revenues	1,616	2,516
Warrant liability	654	-
Current portion of long-term debt	12	216
Total current liabilities	10,059	6,946
Long-term debt, less current portion	-	16
Total liabilities	10,059	6,962
Stockholders' equity		
Common stock, no par value, unlimited shares authorized; 69,452,487 and 27,015,680 shares issued and outstanding at December 31, 2011 and December 31, 2010	245,617	189,491
Additional paid in capital	12,279	12,297
Accumulated deficit	(204,423)	(184,490)
Total stockholders' equity	53,473	17,298
Total Liabilities and Stockholders' Equity	$63,532	$24,260

See notes to the consolidated financial statements.

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ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Expressed in thousands of United States Dollars, except shares and per share amounts)

	Year Ended December 31,		
	2011	2010	2009
Revenues			
Product sales	$4,619	$3,543	$945
Less: Sales returns	-	-	(184)
License fees	240	-	750
Commercial collaborations	80	364	1,410
Contracts and grants	287	3,923	1,450
Total revenues	5,226	7,830	4,371
Cost of goods sold			
Product	5,149	2,663	954
Commercial collaborations	73	194	781
Contracts and grants	296	2,534	1,120
Warranty and inventory reserves	279	409	198
Total cost of goods sold	5,797	5,800	3,053
Gross (loss) profit	(571)	2,030	1,318
Operating expenses			
Research and development	6,960	8,212	9,389
Sales and marketing	3,603	4,051	2,894
General and administrative	7,669	7,553	7,798
Depreciation and amortization	1,324	1,896	2,035
Loss on disposal of assets	924	770	-
Total operating expenses	20,480	22,482	22,116
Loss from operations	(21,051)	(20,452)	(20,798)
Other income (expense)			
Interest expense	(156)	(19)	(107)
Interest income	-	101	188
Realized (loss)/gain on investment	-	(2,045)	851
Realized gain on warrant liabilities	1,274	-	-
Total other income (expense), net	1,118	(1,963)	932
Loss from continuing operations	(19,933)	(22,415)	(19,866)
Gain/(loss) from discontinued operations	-	124	(2,065)
Net loss	(19,933)	(22,291)	(21,931)
Less: Net loss attributable to non-controlling interest	-	5	619
Net loss attributable to Altair Nanotechnologies Inc.	$(19,933)	$(22,286)	$(21,312)
Net loss attributable to Altair Nanotechnologies Inc. stockholders:			
Loss from continuing operations	$(19,933)	$(22,415)	$(19,866)
Gain/(loss) from discontinued operations	-	129	(1,446)
Net loss	$(19,933)	$(22,286)	$(21,312)

Earnings per share attributable to Altair Nanotechnologies Inc. stockholders:			
Basic and diluted:			
Loss from continuing operations	$(0.43)	$(0.84)	$(0.79)
Loss from discontinued operations	$-	$-	$(0.06)
Loss per common share - Basic and diluted	$(0.43)	$(0.84)	$(0.85)
Weighted average shares - basic and diluted	46,889,741	26,550,288	25,044,432

See notes to the consolidated financial statements.

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE LOSS
(Expressed in thousands of United States Dollars, except shares)

	Altair Nanotechnologies Inc. Stockholders						Non-controlling Interest in Subsidiary			
	Common Stock		Additional Paid In	Accumulated	Accumulated Other Compre-hensive (Loss)		Interest In	Accumulated Other Compre-hensive Gain		
	Shares	Amount	Capital	Deficit	Gain	Subtotal	Subsidiary	(Loss)	Subtotal	Total
BALANCE, JANUARY 1, 2009	23,285,918	$180,105	$5,378	$(140,892)	$(1,873)	$42,718	$1,098	$-	$1,098	$43,816
Investment from non-controlling interest	-	-	-	-	-		62	-	62	62
Comprehensive loss:										
Net loss	-	-	-	(21,312)	-	(21,312)	(619)	-	(619)	(21,931)
Other comprehensive gain, net of taxes of $0	-	-	-	-	313	313	-	-	-	313
Comprehensive loss	-	-	-	-	-	(20,999)	-	-	(619)	(21,618)
Share-based compensation	-	221	931	-	-	1,152	-	-	-	1,152
Issuance of restricted stock	65,747	-	-	-	-	-	-	-	-	-
Common stock issued, net of $1,220,735 issuance costs	2,998,617	8,189	4,624	-	-	12,813	-	-	-	12,813
BALANCE, DECEMBER 31, 2009	26,350,282	$188,515	$10,933	$(162,204)	$(1,560)	$35,684	$541	$-	$541	$36,225
Disposal from non-controlling interest	-	-	-	-	-	-	(536)	-	(536)	(536)
Comprehensive loss:										
Net loss	-	-	-	(22,286)	-	(22,286)	(5)	-	(5)	(22,291)
Reclassification adjustment for	-	-	-	-	1,560	1,560	-	-		1,560

realized loss on securities included in net loss										
Comprehensive loss	-	-	-	-	-	(20,726)	-	-	(5)	(20,731)
Share-based compensation	-	283	1,364	-	-	1,647	-	-	-	1,647
Issuance of restricted stock	177,744	-	-	-	-	-	-	-	-	-
Common stock issued, net of $212,737 issuance costs	487,654	692	-	-	-	692	-	-	-	692
BALANCE, DECEMBER 31, 2010	27,015,680	$189,491	$12,297	$(184,490)	$-	$17,298	$-	$-	$-	$17,298
Comprehensive loss:										
Net loss	-	-	-	(19,933)	-	(19,933)	-	-	-	(19,933)
Comprehensive loss	-	-	-	-		(19,933)	-	-	-	(19,933)
Share-based compensation	-	228	512	-	-	740	-	-	-	740
Common stock issued, net of issuance costs of $698 and warrant liabilities	3,600,000	3,796	-	-	-	3,796	-	-	-	3,796
Common stock issued	1,800,000	-	-	-	-	-	-	-	-	-
Common stock issued, net of issuance costs of $5.4M	37,036,807	52,102	-	-	-	52,102	-	-	-	52,102
Warrant redemption	-	-	(530)	-	-	(530)	-	-	-	(530)
BALANCE, DECEMBER 31, 2011	69,452,487	$245,617	$12,279	$(204,423)	$-	$53,473	$-	$-	$-	$53,473

See notes to the consolidated financial statements.

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ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in thousands of United States Dollars)

	Year Ended December 31,		
	2011	2010	2009
OPERATING ACTIVITIES:			
Net loss	$(19,933)	$(22,291)	$(21,931)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,324	1,896	2,035
Securities received in payment of license fees	-	-	(750)
(Gain)/loss on discontinued operations	-	(129)	1,446
Share-based compensation	740	1,647	1,152
Loss on disposal of fixed assets	924	710	17
Change in fair value of warrants	(1,274)	-	-
Impairment of patents	-	47	-
Loss/(gain) on sale of available for sale securities	-	2,045	(868)
Asset deposit	-	-	375
Changes in operating assets and liabilities:			
Accounts receivable, net	985	(635)	276
Accounts receivable from related party, net	-	-	(4)
Product inventories	(67)	(1,599)	(4,896)
Prepaid expenses and other current assets	29	(449)	(1,352)
Other assets	-	125	33
Trade accounts payable	2,959	1,064	958
Accrued salaries and benefits	389	118	(736)
Accrued warranty	143	132	43
Deferred revenues	(900)	2,205	-
Accrued liabilities	34	(58)	(6)
Net cash used in operating activities	(14,647)	(15,172)	(24,208)
INVESTING ACTIVITIES			
Sale of available for sale securities	-	2,599	2,006
Interest on available for sale securities	-	8	6
Purchase of property, plant and equipment	(604)	(953)	(149)
Proceeds from sale of assets	-	13	-
Net cash (used in) provided by investing activities	(604)	1,667	1,863
FINANCING ACTIVITIES:			
Issuance of common shares for cash, net of issuance costs	57,826	692	12,813
Payment of warrant redemption	(530)	-	-
Proceeds from notes payable	1,500	6	387
Payment of notes payable	(1,705)	(600)	(926)
Proceeds from long-term debt	-	-	58
Repayment of long-term debt	(16)	(20)	(15)
Contributions from minority interest	-	-	62
Net cash provided by financing activities	57,075	78	12,379
Net increase (decrease) in cash and cash equivalents	41,824	(13,427)	(9,966)

CASH AND CASH EQUIVALENTS:			
Beginning of period	4,695	18,122	28,088
End of period	$46,519	$4,695	$18,122
SUPPLEMENTAL DISCLOSURE:			
Cash paid for interest	$151	$49	$97
Cash paid for income taxes	None	None	None
NON-CASH TRANSACTIONS:			
Acquisition of assets included in accounts payable	$38	$26	$75
Issuance of restricted stock to directors	$-	$320	$397
Impairment of AlSher Titania fixed assets	$-	$-	$1,308
Payment of license with stock	$-	$-	$750

See notes to the consolidated financial statements.

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2011, 2010, AND 2009
(Expressed in United States Dollars)

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business — We are a Canadian corporation, with principal assets and operations in the United States, whose primary business is developing, manufacturing and selling our nano lithium titanate battery products. Our primary focus is marketing our large-scale energy storage solutions to power companies and electric grid operators throughout the world. In addition, we market our battery products to electric and hybrid-electric mass-transit vehicle manufacturers. During 2010 we also started to expand our market focus to include use of our battery technology in additional industrial markets with applications requiring batteries that can provide high power quickly, a fast recharge, have a long cycle life, operate at a wide temperature range and are extremely safe.

We also provide contract research services on select projects where we can utilize our resources to develop intellectual property and/or new products and technology. Although contract services revenue comprised a significant portion of our total revenues through 2010 accounting for 5%, 50%, and 33%, in 2011, 2010 and 2009, respectively, there has been a major decline in this percentage as our battery product sales increased in 2011.

In July 2011, Canon Investment Holdings, Ltd, ("Canon") acquired a majority of common shares of the Company. As a result of this investment, the Company initiated activities to enter the China market including the sales of batteries and systems, and to develop a manufacturing and supply chain strategy to reduce costs.

Principles of Consolidation — The consolidated financial statements include the accounts of Altair Nanotechnologies Inc. and our subsidiaries which include (1) Altairnano, Inc. ("ANI"), (collectively referred to as the "Company"), which are 100% owned and (2) AlSher Titania LLC, which was 70% owned by ANI but was sold April 30, 2010. Both of the subsidiaries are incorporated in the United States of America. Inter-company transactions and balances have been eliminated in consolidation.

Basis of Presentation — The accompanying consolidated financial statements have been prepared on a going concern basis which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the consolidated financial statements for the years ended December 31, 2011, 2010 and 2009, we incurred net losses of $19.9 million, $22.3 million, and $21.3 million, respectively. At December 31, 2011 and 2010, we had stockholders' equity of $53.5 million and $17.3 million, respectively.

The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern. Our continuation as a going concern is dependent upon our ability to generate sufficient cash flow to meet our obligations on a timely basis, to obtain additional financing or refinancing as may be required, including expansion into China, to develop commercially viable products and processes, and ultimately to establish profitable operations. We have financed operations through operating revenues and through the issuance of equity securities (common shares, convertible debentures, stock options and warrants), and debt (term notes). Until we are able to generate positive operating cash flows, additional funds will be required to support operations. We believe that current working capital, cash receipts from anticipated sales and funding through additional financing or raising additional capital in 2012 to fund our China expansion as well as sustain our U.S. operations will be sufficient to enable us to continue as a going concern through 2012.

On October 21, 2010, the Board of Directors of the Company authorized a reverse split of the Company's common stock at a ratio of one-for-four, effective close of business on November 15, 2010. The Company's stockholders previously approved the reverse split in May 2010. As a result of the reverse split, every four shares of common stock outstanding were combined into one share of common stock. The reverse split did not affect the amount of equity the Company has nor did it affect the Company's market capitalization. All previously reported share and per share amounts have been restated in the accompanying consolidated financial statements and related notes to reflect the reverse stock split.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates — The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents — Cash and cash equivalents consist principally of bank deposits and institutional money market funds. Short-term investments that are highly liquid have insignificant interest rate risk and original maturities of 90 days or less are classified as cash and cash equivalents. Investments that do not meet the definition of cash equivalents are classified as held-to-maturity or available-for-sale.

Our cash balances are maintained in bank accounts that are fully insured by the Federal Deposit Insurance Corporation ("FDIC") and Canada Deposit Insurance Corporation ("CDIC"). The FDIC adopted a final rule amending its deposit insurance regulations on November 15, 2010 to implement Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act providing for unlimited deposit insurance for non-interest bearing transaction accounts for two years starting December 31, 2010. Our Canadian deposits were insured up to CN $100,000 and the US deposits were in a non-interest bearing account with unlimited deposit insurance. At December 31, 2011 and December 31, 2010 we had $46.3 million and $2.2 million, respectively, and the bank balances were fully insured by the FDIC or CDIC.

Investment in Available for Sale Securities — The Company did not have any investments in Available for Sale securities at December 31, 2011.

Accounts Receivable — Accounts receivable consists of amounts due from customers for services and product sales, net of an allowance for doubtful accounts. We determine the allowance for doubtful accounts by reviewing each customer account and specifically identifying any potential for loss.

Inventory – We value our inventories generally at the lower of cost (first-in, first-out method) or market. We employ a full absorption procedure using standard cost techniques. The standards are customarily reviewed and adjusted every three months. Overhead rates are recorded to inventory based on normal capacity. Any idle facility costs or excessive spoilage are recorded as current period charges. As of December 31, 2011 we recorded a $264,000 inventory valuation allowance due to quality issues with one of our cell suppliers. As of December 31, 2010, we recorded a $623,000 inventory valuation allowance due to quality issues with our cell supplier, of which $541,000 was recorded as a receivable from our vendor covered under their product warranty. At December 31, 2010, we had a corresponding account payable to our supplier for these cells. We reached an agreement with our supplier in 2011 and the receivable was offset against the supplier account payable.

Research and Development Expenditures — The costs of materials, equipment, or facilities that are acquired or constructed for a particular research and development project and that have no alternative future uses (in other research and development projects or otherwise) are expensed as research and development costs at the time the costs are incurred. Research and development expenditures related to materials and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses (in research and development projects or otherwise) are capitalized when acquired or constructed. Research and development expenditures, which include the cost of materials consumed in research and development activities, salaries, wages and other costs of personnel engaged in research and development, costs of services performed by others for research and development on our behalf and indirect costs are expensed as research and development costs when incurred.

Stock-Based Compensation — We measure the cost of services received in exchange for an award of equity instruments based on the grant-date fair value of the award. That cost is recognized over the period during which services are provided in exchange for the award, known as the requisite vesting period.

Long-Lived Assets — We evaluate the carrying value of long-lived assets whenever events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. The carrying value of a long-lived asset is considered impaired when the total projected undiscounted cash flows expected to be generated by the asset are less than the carrying value. Our estimate of the cash flows is based on the information available at the time including the following: internal budgets; sales forecasts; customer trends; anticipated production volumes; and market conditions over an estimate of the remaining useful life of the asset which may range from 3 to 10 years for most equipment and up to 22 years for our building and related building improvements. If an impairment is indicated, the asset value is written down to its fair value. Events or circumstances that could indicate the existence of a possible impairment include obsolescence of the technology, an absence of market demand for the product or the assets used to produce it, a history of operating or cash flow losses and/or the partial or complete lapse of technology rights protection.

As of December 31, 2011, we estimate that our future cash flows, on an undiscounted basis, are greater than our $7.2 million investment in long-lived assets. Our estimated future cash flows include anticipated product margins and commercial collaborations, since our long-lived asset base, which is primarily composed of production, laboratory and testing equipment is utilized to fulfill customer contracts in all revenue categories.

Management evaluates the carrying value and useful lives of its long-lived assets annually. In 2011, the long-lived assets on hand were evaluated for their future use. Assets with a net book value of $924,000 were impaired as of December 31, 2011.

In the first quarter of 2010, we reviewed our four capitalized patents and determined that three of these patents had value in excess of their net book value of $483,000 at that time. In the first quarter, we determined that the fourth patent no longer had value. The fourth patent had an original cost of $152,000, accumulated depreciation of $105,000 and a net value of $47,000. Accordingly, an impairment charge of $47,000 was recorded, and is reflected for the twelve months ended December 31, 2010.

We reviewed the remaining three capitalized patents and show a net weighted average value of $350,000 and $426,000, at December 31, 2011 and 2010, respectively. AlSher currently has an exclusive license to use this technology from Altair.

Property, plant and equipment held and used are stated at cost less accumulated depreciation. Depreciation is recorded using the straight-line method over the following useful lives:

Furniture and office equipment	3–7 years
Vehicles	5 years
Nanoparticle production equipment	5–10 years
Building and improvements	30 years

Patents related to the nanoparticle production technology are carried at cost and amortized on a straight-line basis over their estimated useful lives, for a weighted average amortization period of 16.7 years.

Revenue Recognition — We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or service has been performed, the fee is fixed and determinable, and collectability is reasonably assured. Our revenues were derived from product sales, commercial collaborations and contracts and grants. Revenue from product sales is recognized upon delivery of the product, unless specific contractual terms dictate otherwise. Based on the specific terms and conditions of each contract/grant, revenues are recognized on a time and materials basis, a percentage of completion basis and/or a completed contract basis. Revenue under contracts based on time and materials is recognized at contractually billable rates as labor hours and expenses are incurred. Revenue under contracts based on a fixed fee arrangement is recognized based on various performance measures, such as stipulated milestones. As these milestones are achieved, revenue is recognized. From time to time, facts develop that may require us to revise our estimated total costs or revenues expected. The cumulative effect of revised estimates is recorded in the period in which the facts requiring revisions become known. The full amount of anticipated losses on any type of contract is recognized in the period in which it becomes known. Payments received in advance relating to the future performance of services or deliveries of products are deferred until the performance of the service is complete or the product is shipped. Upfront payments received in connection with certain rights granted in contractual arrangements are deferred and revenue is recognized over the related time period which the benefits are received.

Accrued Warranty — We provide a limited warranty for battery packs and energy storage systems. A liability is recorded for estimated warranty obligations at the date products are sold. Since these are new products, the estimated cost of warranty coverage is based on cell and module life cycle testing and compared for reasonableness to warranty rates on competing battery products. As sufficient actual historical data is collected on the new product, the estimated cost of warranty coverage will be adjusted accordingly. The liability for estimated warranty obligations may also be adjusted based on specific warranty issues identified.

Non-controlling Interest — In April 2007, The Sherwin-Williams Company ("Sherwin") entered into an agreement with us to form AlSher Titania LLC ("AlSher"), a Delaware limited liability company. AlSher is a joint venture combining certain technologies of ours and Sherwin in order to develop and produce titanium dioxide pigment for use in paint and coatings and nano titanium dioxide materials for use in a variety of applications, including those related to removing contaminants from air and water. Pursuant to a Contribution Agreement dated April 24, 2007 among Sherwin, AlSher, and us, we contributed to AlSher an exclusive license to use our technology (including our hydrochloride pigment process) for the production of titanium dioxide pigment and other titanium containing materials (other than battery or nanoelectrode materials) and certain pilot plant assets with a net book value of $3,110,000. We received no consideration for the license granted to AlSher other than our ownership interest in AlSher. Sherwin agreed to contribute to AlSher cash and a license agreement related to a technology for the manufacture of titanium dioxide using the digestion of ilmenite in hydrochloric acid. As a condition to enter into the second phase of the joint venture, we agreed to complete the pigment pilot processing plant and related development activities by January 2008. The 100 ton pigment pilot processing plant was commissioned in February 2008 and the costs associated with this effort were partially reimbursed by AlSher. We contributed any work in process and fixed assets associated with completion of the pigment pilot processing plant to the AlSher joint venture. For each reporting period, AlSher is consolidated with our subsidiaries because we have a controlling interest in AlSher and any inter-company transactions are eliminated (refer to Note 1 – Basis of Preparation of Consolidated Financial Statements). The non-controlling shareholder’s interest in the net assets and net income or loss of AlSher are reported as non-controlling interest in subsidiary on the condensed consolidated balance sheet and as non-controlling interest share in the condensed consolidated statement of operations, respectively.

Asset impairment of $1.3 million in 2009 relates to the expense of adjusting AlSher Titania, LLC assets to fair market value as of December 31, 2009. These assets were temporarily idled throughout 2009 as we searched for an interested party to acquire our interests in AlSher Titania. On April 30, 2010, we sold our 70% share in the AlSher Titania Joint Venture to Sherwin-Williams. We recorded a gain of $124,000 on discontinued operations that was comprised of $400,000 loss on disposal of fixed assets and $524,000 remaining equity in noncontrolling interest.

Overhead Allocation — Facilities overhead and production employees fringe benefit costs are initially recorded in general and administrative expenses and then allocated to research and development and product inventories based on relative labor costs. Production equipment depreciation expense is recorded to cost of goods sold as the equipment is used to produce product sold to customers and production equipment depreciation is attached to, and transferred to product in ending inventory until such product is used to satisfy customer orders.

Net Loss per Common Share — Basic loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted loss per share is computed using the weighted average number of common and potentially dilutive shares outstanding during the period. Potentially dilutive shares consist of the incremental common shares issuable upon the exercise of stock options and warrants. Potentially dilutive shares are excluded from the computation if their effect is anti-dilutive. We had a net loss for all periods presented herein; therefore, none of the stock options and warrants outstanding during each of the periods presented were included in the computation of diluted loss per share as they were anti-dilutive. Stock options and warrants to purchase a total of 4,041,478 as of December 31, 2011, 3,271,138 shares as of December 31, 2010, and 2,987,162 shares as of December 31, 2009 were excluded from the calculations of diluted loss per share for the years ended December 31, 2011, 2010 and 2009, respectively.

Accumulated Other Comprehensive Loss — Accumulated other comprehensive loss is a separate component of stockholders` equity and consists entirely of unrealized loss on the investment in available for sale securities.

Income Taxes — The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of the Company's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and the Company's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. Deferred tax assets for which no valuation allowance is recorded may not be realized upon changes in facts and circumstances, resulting in a future charge to establish a valuation allowance.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized. The company is no longer subject to income tax examinations by tax authorities for years prior to 2004.

Fair Value of Financial Instruments — Our financial instruments such as cash and cash equivalents and long-term debt, when valued using market interest rates, would not be materially different from the amounts presented in the consolidated financial statements.

Recently Issued Accounting Guidance

In May 2011, the FASB issued changes to conform existing guidance regarding fair value measurement and disclosure between GAAP and International Financial Reporting Standards. These changes both clarify the FASB's intent about the application of existing fair value measurement and disclosure requirements and amend certain principles or requirements for measuring fair value or for disclosing information about fair value measurements. The clarifying changes relate to the application of the highest and best use and valuation premise concepts, measuring the fair value of an instrument classified in a reporting entity's shareholders' equity, and disclosure of quantitative information about unobservable inputs used for Level 3 fair value measurements. The amendments relate to measuring the fair value of financial instruments that are managed within a portfolio; application of premiums and discounts in a fair value measurement; and additional disclosures concerning the valuation processes used and sensitivity of the fair value measurement to changes in unobservable inputs for those items categorized as Level 3, a reporting entity's use of a nonfinancial asset in a way that differs from the asset's highest and best use, and the categorization by level in the fair value hierarchy for items required to be measured at fair value for disclosure purposes only. These changes become effective for the Company on January 1, 2012. Other than the additional disclosure requirements, management has determined that the adoption of these changes will not have an impact on the consolidated financial statements.

In June 2011, the FASB issued changes to the presentation of comprehensive income. These changes give an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements; the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity was eliminated. The items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income were not changed. Additionally, no changes were made to the calculation and presentation of earnings per share. These changes become effective for Altair on January 1, 2012. Management is currently evaluating these changes to determine which option will be chosen for the presentation of comprehensive income. Other than the change in presentation, management has determined these changes will not have an impact on the Consolidated Financial Statements.

In December 2011, the FASB issued changes to the disclosure of offsetting assets and liabilities. These changes require an entity to disclose both gross information and net information about both instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to an agreement similar to a master netting arrangement. The enhanced disclosures will enable users of an entity's financial statements to understand and evaluate the effect or potential effect of master netting arrangements on an entity's financial position, including the effect or potential effect of rights of setoff associated with certain financial instruments and derivative instruments. These changes become effective for the Company on January 1, 2013. Management has determined that the adoption of these changes will not have an impact on the consolidated financial statements.

Reclassifications — Certain reclassifications have been made to prior period amounts to conform to classifications adopted in the current year.

3. FAIR VALUE MEASUREMENTS

The following are the methods and assumptions we use to estimate the fair value of our financial instruments.

Cash and cash equivalents
Due to their short term nature, carrying amount approximates fair value.

Accounts receivable
Due to their short term nature, carrying amount approximates fair value.

Trade accounts payable
Due to their short term nature, carrying amount approximates fair value.

Warrant liabilities
Fair values are determined using the Black-Scholes-Merton option-pricing model, a Level 3 input.

Long-term debt
Due to the short term nature of the current portion of long-term debt, the carrying amount approximates fair value. The non current portion of long-term debt is not material and the carrying amount approximates fair value.

Our financial instruments are accounted for at fair value on a recurring basis. We have no financial instruments accounted for on a non-recurring basis as of December 31, 2011 or 2010. Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. A market or observable inputs is the preferred source of values, followed by assumptions based on hypothetical transactions in the absence of market inputs.

The valuation techniques are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs that are both significant to the fair value measurement and unobservable.

No assets were recorded at fair value on a recurring basis at December 31, 2011.

In arriving at fair-value estimates, we utilize the most observable inputs available for the valuation technique employed. If a fair-value measurement reflects inputs at multiple levels within the hierarchy, the fair-value measurement characterized based upon the lowest level of input that is significant to the fair-value measurement. For us, recurring fair-value measurements are performed for warrant liabilities.

All warrant liability financial instruments are recognized in the balance sheet at their fair value. Changes in the fair values of warrant liability financial instruments are reported in earnings. We do not hold any derivative liability financial instruments that reduce risk associated with hedging exposure and we have not designated any of our warrant liability financial instruments as hedge instruments.

The Company has no items valued using Level 1 and Level 2 inputs. The following table sets forth the fair value hierarchy of the Company's financial liabilities that were accounted for at fair value, on a recurring bases, as of December 31, 2011.

There were no financial liabilities outstanding at December 31, 2010. The following table summarizes the valuation of our financial liabilities by the fair value hierarchy at December 31, 2011.

	Total	Level 1	Level 2	Level 3
Warrants	$ 654			$ 654
Total	$ 654			$ 654

The Company utilizes inputs that are not observable from objective sources, such as the Company's internally developed assumptions used in pricing an asset or liability and Company market data or assumptions that market participants would use in pricing the liability. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy. The Company uses an income approach to value its warrant liability financial instruments. These instruments are valued using a Black-Scholes-Merton option-pricing model using market information as of the reporting date such as prevailing interest rates, the Company's stock price volatility, and expected term.

There have been no transfers between Level 1, Level 2, or Level 3 categories.

The following table summarizes current warrant liability financial instruments.

Current Liabilities at Fair Value:	2011 Cost	Fair Value	Carrying Value
Warrant liability	$ 1,928	654	654
Total current	$ 1,928	654	654

The activity relating to assets valued on a recurring basis utilizing Level 3 inputs for the twelve months ended December 31, 2010 is summarized below:

In thousands of dollars

	Auction rate corporate notes 2010
Beginning Balance, January 1	$ 2,587
Purchases, sales, issuances, and settlements*	(1,950)
Realized losses	(1,950)
Unrealized gains/(losses)	-
Other adjustments	-
Reclassification adjustment for realized loss on securities	-
included in net loss	1,313
Transfers into and (or) out of Level 3**	-
Ending Balance, December 31	$ -

*In 2010, there was a sale of a Level 3 financial instrument related to auction rate corporate notes. There were no purchases, issuances or settlements of Level 3 financial instruments in 2010.

**In 2010, there were no transfers of financial instruments into or out of Level 3.

The activity relating to liabilities valued on a recurring basis utilizing Level 3 inputs for the twelve months ended December 31, 2011 is summarized below:

In thousands of dollars

	Warrant Liabilities 2011
Beginning Balance, January 1	$ -
Purchases, sales, issuances, and settlements*	1,928
Realized gains	(1,274)
Unrealized gains/(losses)	-
Other adjustments	-
Transfers into and (or) out of Level 3**	-
Ending Balance, December 31	$ 654

*In 2011, there was an issuance of a Level 3 financial instrument related to warrant liabilities. There were no purchases, sales or settlements of Level 3 financial instruments in 2011.
**In 2011, there were no transfers of financial instruments into or out of Level 3.

4. PRODUCT INVENTORIES

Product Inventories consisted of the following at December 31, 2011 and 2010:

In thousands of dollars

	2011	2010
Raw Materials	$ 4,193	$ 2,979
Work in process	2,201	920
Finished goods	826	2,926
Total product inventories	$ 7,220	$ 6,825

As of December 31, 2010 and 2011, inventory relates to the production of batteries targeted at the stationary power and electric bus markets.

We recorded an inventory valuation allowance on finished goods of $264,000 and $623,000 at December 31, 2011 and 2010, respectively.

5. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following as of December 31, 2011 and 2010:

In thousands of dollars

	2011	2010
Machinery and equipment	$ 11,117	$ 11,035
Building and improvements	4,447	5,155
Furniture, office equipment & other	1,826	1,200
Total	17,390	17,390
Less accumulated depreciation	(10,520)	(8,663)
Total property, plant and equipment	$ 6,870	$ 8,727

Depreciation expense for the years ended December 31, 2011 and 2010, totaled $1.3 and $1.9 million, respectively.

In 2011, 2010 and 2009, we incurred a loss on disposal of assets of $924,000, $770,000 and zero, respectively. These assets include those that were determined to have no further use for research and development or production in Reno, Nevada.

6. PATENTS

Patents consisted of the following at December 31, 2011 and 2010:

In thousands of dollars

	2011	2010
Patents and patent applications	$ 1,366	$ 1,366
Less accumulated amortization	(1,016)	(940)
Total patents and patent applications	$ 350	$ 426

All patents are being amortized on a straight-line basis over their useful lives with a weighted average amortization period of approximately 16.7 years. Amortization expense was $76,000, $78,000 and $84,000 for the years ended

December 31, 2011, 2010 and 2009, respectively. For each of the next five years, amortization expense relating to intangibles is expected to be approximately $76,000 per year. We expense all costs, as incurred, associated with renewing or extending our patents.

7. ACCRUED WARRANTY

Accrued warranty consisted of the following at December 31, 2011 and 2010:

In thousands of dollars

		2011		2010
Beginning Balance – January 1,	$	211	$	79
Charges for accruals in the current period		156		152
Reductions for warranty services provided		(13)		(20)
Ending Balance – December 31,	$	354	$	211

During 2011, the warranty provision increased $156,000. The charges against the provision of $13,000 primarily reflects activity in connection with the AES prototype battery pack purchased in 2007.

8. ACCRUED LIABILITIES

Accrued liabilities consisted of the following at December 31, 2011 and 2010:

In thousands of dollars

		2011		2010
Accrued use tax	$	7	$	7
Accrued property tax		-		21
Accrued mineral lease payments		-		67
Accrued reclamation costs		6		6
Accrued straight line rent		22		17
Accrued fees to vendors		386		269
Total accrued liabilities	$	421	$	387

We have and continue to evaluate our environmental liability and as of December 31, 2011, we do not believe we have any material liability.

9. NOTES PAYABLE

Notes payable consisted of the following at December 31, 2011 and 2010:

In thousands of dollars

		2011		2010
Total Obligation:				
Note payable to Imperial Credit Corporation		-		196
Capital Lease to Dell Financial Services		-		3
Capital Lease to Steelcase		12		32
		12		231
Less current portion:				
Willis of Illinois		-		(39)
Note payable to Imperial Credit Corporation		-		(157)
Capital lease obligation		(12)		(20)
		(12)		(216)
Long-term portion of notes payable	$	-	$	16

On August 8, 2002, we entered into a purchase and sale agreement with BHP Minerals International, Inc. (“BHP”), wherein we purchased the land, building and fixtures in Reno, Nevada where our titanium processing assets are located. In connection with this transaction, BHP also agreed to terminate our obligation to pay royalties associated with the sale or use of the titanium processing technology. The note and all accrued interest were paid in full in January 2010.

10. STOCK BASED COMPENSATION

At December 31, 2011, we have a stock incentive plan, administered by the Board of Directors, which provides for the granting of options and restricted shares to employees, officers, directors and other service providers. This Plan is described in more detail below. The compensation cost that has been charged against income for this Plan was $0.7 million, $1.6 million, and $1.1 million for the years ended 2011, 2010 and 2009, respectively. Of this amount, $228,000, $283,000 and $221,000 was recognized in connection with restricted stock and options granted to non-employees for the years ended 2011, 2010 and 2009, respectively.

Stock Options

The total number of shares authorized to be granted under the Plan was increased from 750,000 to an aggregate of 2,250,000 based on the proposal approved at the annual and special meeting of shareholders on May 30, 2007. On June 23, 2011, we held an annual and special meeting of shareholders. The proposal to increase the number of authorized shares under the Plan from 2,250,000 to 7,250,000 shares was approved at this meeting. The additional 5,000,000 shares approved by the stockholders are not available for stock option issuance at this time, as the Board of Directors has not authorized the filing of the related Registration Statement on Form S-8. Prior stock option plans, under which we may not make future grants, authorized a total of 1,650,000 shares, of which options for 1,028,725 common shares were granted (net of expirations) and options for 15,375 common shares are outstanding and unexercised at December 31, 2011. Options granted under the plans are granted with an exercise price equal to the fair value of a common share at the date of grant, have five-year or ten-year terms and typically vest over periods ranging from immediately to four years from the date of grant. The estimated fair value of equity-based awards, less expected forfeitures, is amortized over the awards’ vesting period utilizing the graded vesting method. Under this method, unvested amounts begin amortizing at the beginning of the month in which the options are granted.

In calculating compensation recorded related to stock option grants for the years ended December 31, 2011, 2010 and 2009, the fair value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option-pricing model and the following weighted average assumptions:

	2011	2010	2009
Dividend yield	None	None	None
Expected volatility	94%	84%	82%
Risk-free interest rate	1.02%	1.83%	1.50%
Expected life (years)	7.10	5.75	5.72

The computation of expected volatility used in the Black-Scholes Merton option-pricing model is based on the historical volatility of our share price. The expected term is estimated based on a review of historical and future expectations of employee exercise behavior. The risk-free interest rates are based on a yield curve of interest rates at the time of the grant based on the contractual life of the option.

A summary of option activity under our equity-based compensation plans as of December 31, 2011, 2010 and 2009, and changes during the year then ended is presented below:

	2011				2010				'2009			
	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1,	1,514,025	$7.93	7.5	$-	1,230,034	$9.60	7.8	$2,000	989,108	$12.12	7.4	$11,000
Granted	600,000	$1.34			444,312	$3.94			401,188	$4.64		
Exercised	-	-			-	-			-	-		
Forfeited/expired	(549,201)	$7.41			(160,321)	$9.57			(160,262)	$12.80		
Outstanding at December 31,	1,564,824	$5.58	7.7	-	1,514,025	$7.93	7.5	-	1,230,034	$9.60	7.8	$2,000
Exercisable at December 31,	807,360	$8.91	6.2	-	669,872	$10.96	6.3	-	554,854	$12.12	6.6	-

As of December 31, 2011, 2010, and 2009 there was $479,000, $1.2 million, and $902,000, respectively, of total unrecognized compensation cost related to non-vested options granted under the plans. That cost is expected to be recognized over a weighted average period of four years for 2011, and one year for 2010, and 2009. The total fair value of options vested during the years ended December 31, 2011, 2010, and 2009 was $2.2 million, $1.1 million, and $1.5 million, respectively.

No cash was received from stock option exercises for the years ended December 31, 2011, 2010 and 2009. The company issues shares from the registered stock incentive plan to satisfy the exercise of stock options and the conversion of stock awards.

A summary of the status of non-vested shares at December 31, 2011, 2010 and 2009 and changes during the year then ended, is presented below:

	2011		2010		2009	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Non-vested shares at January 1,	844,153	$ 5.17	675,180	$ 7.52	512,707	$ 11.68
Granted	600,000	1.34	444,312	3.94	401,188	4.64
Vested	(617,441)	5.71	(201,660)	8.52	(199,537)	11.84
Forfeited/Expired	(69,265)	5.72	(73,679)	5.96	(39,177)	10.60
Non-vested shares at December 31,	757,447	$ 3.63	844,153	$ 5.17	675,180	$ 7.52

Non-vested shares relating to non-employees reflected in the table above include 17,187 shares outstanding at January 1, 2011, no shares granted, no shares exercised and 7,813 shares were vested during the year ended December 31, 2011, resulting in 3,124 non-vested shares outstanding at December 31, 2011. Non-vested shares relating to non-employees reflected in the table above include 29,583 shares outstanding at January 1, 2010, no shares granted, no shares exercised, and 40,000 shares vested during the year ended December 31, 2010, resulting in 17,187 non-vested shares outstanding at December 31, 2010. Non-vested shares relating to non-employees reflected in the table above include 49,875 shares outstanding at January 1, 2009, 6,250 shares granted, no shares exercised, and 26,542 shares vested during the year ended December 31, 2009, resulting in 29,584 non-vested shares outstanding at December 31, 2009. The intrinsic value of the options vested was $0 at December 31, 2011 and 2010.

Restricted Stock

Our stock incentive plan provides for the granting of other incentive awards in addition to stock options. During the year ended December 31, 2011 the Board of Directors did not approve the grant of any new restricted stock under the plan. However, due to the completion of the Share Subscription Agreement with Canon and the change in control, the vesting for the remaining 88,872 shares was accelerated. Restricted shares have the same voting and dividend rights as our unrestricted common shares, vest over a two-year period and are subject to the employee's or director's continued service. Compensation cost for restricted stock is recognized in the financial statements on a pro rata basis over the vesting period.

A summary of the changes in restricted stock outstanding during the year ended December 31, 2011, 2010 and 2009, is presented below:

	2011		2010		2009	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Non-vested shares at January 1,	210,996	$ 2.16	76,624	$ 4.64	41,077	$ 9.08
Granted	-	-	177,744	1.80	95,529	4.16
Vested	(210,996)	2.16	(43,372)	5.10	(30,200)	9.20
Forfeited/expired	-	-	-	-	(29,782)	4.00
Non-vested shares at December 31,	-	-	210,996	$ 2.16	76,624	$ 4.64

As of December 31, 2011, there was no remaining unrecognized compensation expense because of the acceleration of vesting for the restricted stock. This was due to the change in control resulting from the completion of the Share Subscription Agreement with Canon. As of December 31, 2010, and 2009 we had total unrecognized compensation expense of $228,000, and $225,000, respectively, net of estimated forfeitures, related to restricted stock.

11. WARRANTS

Warrants Issued to Investors

The warrants issued in the March 30, 2011 offering are considered financial liabilities due primarily to their anti-dilution protection provisions that allow for the automatic reset of the exercise price upon any future sale of common stock instruments at or below the current exercise price of the warrants. As such, the warrants are required to be adjusted to fair value each reporting period and the change in fair value of the warrant liabilities is classified in other (expense)/income in the statement of operations. The warrants are classified as short-term warrant liabilities in the balance sheet.

The fair value of the warrants was determined using the Black-Scholes-Merton option-pricing model and the following weighted average assumptions were used:

	December 31, 2011
Stock Price	$ 0.66
Exercise Price	$ 2.56
Expected Volatility	105%
Expected Dividend Yield	None
Expected Term (in years)	4.8
Risk-free Interest Rate	0.77%

As of December 31, 2011, the value of the warrant liability was $0.7 million and the change in fair value during the twelve months ended December 31, 2011 was a gain of $1.3 million. The gain was recorded as other income in the statement of operations.

The completion of the Share Subscription Agreement with Canon on July 22, 2011 resulted in a change in control. As such, the company was obligated to holders of May 2009 warrants who requested redemption a total of $530,000.

Warrant activity for the years ended December 31, 2011, 2010 and 2009 is summarized as follows:

In thousands of dollars

	2011			2010			2009		
	Warrants	Weighted Average Exercise Price	Aggregate Intrinsic Value	Warrants	Weighted Average Exercise Price	Aggregate Intrinsic Value	Warrants	Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding at beginning of year	1,757,115	$ 4.60	$ -	1,757,115	$ 4.60	$ -	170,371	$ 16.60	$ -
Issued	1,800,000	2.49		-	-		1,649,245	4.00	
Expired	(107,871)	13.99		-	-		(62,500)	21.06	
Warrant redemption	(972,590)	3.28		-	-		-	-	
Exercised	-	-		-	-		-	-	
Outstanding at end of year	2,476,654	$ 2.49	-	1,757,115	$ 4.60	-	1,757,115	$ 4.60	-
Currently exercisable	2,476,654	$ 2.49	-	1,757,115	$ 4.60	-	1,757,115	$ 4.60	-

The following table summarizes information about warrants outstanding at December 31, 2011:

	Warrants Outstanding and Exercisable		
Range of Exercise Prices	Warrants	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price

$	1.00 to 2.30	676,654	4.4	$	2.30
$	2.31 to 4.00	1,800,000	4.8		2.56
		2,476,654	4.7	$	2.49

The warrants expire on various dates ranging to May 2016.

12. OTHER TRANSACTIONS

On July 22, 2011, the Company and Canon completed the sale by the Company, and the purchase by an affiliate of Canon, of 37,036,807 common shares of the Company, no par value, (the "Shares") at a purchase price of $1.5528 per share, or approximately $57.5 million in the aggregate, pursuant to the Share Subscription Agreement. Pursuant to the Share Subscription Agreement, Canon has designated its affiliate, Energy Storage Technology (China) Group Limited, a company organized under the laws of Hong Kong ("Energy Storage"), as the purchaser of the Shares. Immediately following the closing, Energy Storage held 53.3% of the 69,452,487 common shares outstanding (49.8% on a fully diluted basis).

The Company engaged JMP Securities and completed a capital raise on March 30, 2011. The Purchase Agreement with investors provided for the issuance of additional common shares ("Adjustment Shares") following such adjustment, if the Share Subscription Agreement with Canon was terminated or adversely amended, or if the transaction contemplated thereby was not closed by July 17, 2011. On July 17, 2011, the Share Subscription with Canon was not closed, therefore we issued 1,800,000 Adjustment Shares to the investors on July 18, 2011.

13. LEASES

Operating Leases — We lease certain premises for office space and other corporate purposes. Operating lease commitments at December 31, 2011 were:

In thousands of dollars:	
2012	$166
Thereafter	-
Total	$166

Lease expense for the years ended December 31, 2011, 2010 and 2009 totaled $166,000, $319,000 and $262,000, respectively.

Future minimum payments on capitalized leases are as follows:

In thousands of dollars:		
Year ending December 31:		
2012		12
2013		-
Total		12
Less amount representing interest		-
Present value of net minimum lease payments		12
Less current maturity		(12)
Present value of net minimum leases included in long-term debt	$	-

14. INCOME TAXES

Losses/profit before income taxes include a profit relating to non-U.S. operations of $413,000 for the period ending 7/21/2011, as of the change of control, and losses of $2.7 million and $361,000 in the years ended December 31, 2010 and 2009, respectively.

Because of the net operating losses and a valuation allowance on deferred tax assets, there was no provision for income taxes recorded in the accompanying consolidated financial statements for each of the three years ended December 31, 2011, 2010, and 2009.

A reconciliation of the federal statutory income tax rate of 35% and our effective income tax rates is as follows:

In thousands of dollars:

	Year Ended December 31,		
	2011	2010	2009
Federal statutory income tax benefit	$ (6,977)	$ (7,802)	$ (7,459)
Expiration of net operating loss carry forwards	(420)	942	1,509
Other, net	329	(60)	(17)
True up to prior tax returns	-	(607)	(682)
Exercise of incentive stock options	(270)	478	318
Impact of ownership change on net operating loss	47,955	-	-
Valuation allowance	(40,617)	7,049	6,331
Total	$ -	$ -	$ -

The components of the deferred tax assets consisted of the following as of December 31, 2011 and 2010:

In thousands of dollars:

	2011	2010
Deferred tax assets:		
Net operating loss carry forwards	$ 11,336	$ 52,706
Basis difference in intangible assets	424	724
Accruals	673	640
Tax credits	276	465
Basic difference in property, plant, and equipment	(513)	4
Other, net	434	504
Total deferred tax assets	12,630	55,043
Deferred tax liabilities:		
Basis difference in property, plant, and equipment	-	-
Total deferred tax liabilities	-	-
Valuation allowance	(12,630)	(55,043)
Net deferred tax assets	$ -	$ -

As a result of certain realization requirements, the table of deferred tax assets shown above does not include certain deferred tax assets at December 31, 2011 and 2010 that arose directly from tax deductions related to equity compensation in excess of compensation recognized for financial reporting. Equity will be increased by approximately $27,000 if and when such deferred tax assets are ultimately realized. There was no windfall tax benefit in 2011 for stock compensation. We use tax law ordering for purposes of determining when excess tax benefits have been realized.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

In thousands of dollars:

	2011	2010
Balance at January 1	$ 27	$ 27
Reductions based on tax positions related to the current year	-	-
Balance at December 31	$ 27	$ 27

Interest or penalties related to unrecognized tax benefits are not material.

The Company has no material uncertain tax positions.

Our operating loss carry-forwards include losses generated in the United States and in Canada. The net operating loss carry-forwards total approximately $25.6 million as of December 31, 2011, excluding any potential Section 382 limitations described below, and will expire at various dates as follows:

2012 - 2015	$-
2016 - 2020	$6,153,000
2021 - 2025	$6,526,000
2026 - 2031	$12,909,000

Due to the significant increase in common stock issued and outstanding from 2005 through 2011, Section 382 of the Internal Revenue Code may provide significant limitations on the utilization of net operating loss carry-forwards. The company performed section 382 analysis and as a result of these limitations, it is estimated that as of December 31, 2011, approximately $135.7 million of these operating loss carryforwards have expired without being utilized. Due to the consummation of the Canon deal on July 22, 2011, resulting in a change in control of the company, Section 382 of the Internal Revenue Code may require significant additional limitations on the utilization of net operating loss carry-forwards.

Based on the historical taxable income and projections for future taxable income over the periods in which the deferred income tax assets become deductible, management believes it more likely than not that the Company will not realize benefits of these deductible differences as of December 31, 2011. Management has, therefore, established a full valuation allowance against its net deferred income tax assets as of December 31, 2011.

We are subject to taxation in the U.S., Canada and various states. We record liabilities for income tax contingencies based on our best estimate of the underlying exposures. We have not been audited by any jurisdiction since our inception in 1998. We are open for audit by the U.S. Internal Revenue Service, the Canada Revenue Agency and U.S. state tax jurisdictions from our inception in 1998 to 2011.

15. COMMITMENTS AND CONTINGENCIES

Contingencies — We are subject to claims in the normal course of business. Management, after consultation with legal counsel, believes that liabilities, if any, resulting from such claims will not materially affect our financial position or results of operations.

Litigation — JMP Dispute. On or about September 9, 2011, JMP Securities LLC ("JMP") filed a complaint against the Company in the United States District Court in the Northern District of California. JMP alleges breach of contract, promissory estoppel, fraud and negligence misrepresentation and seeks damages and punitive damages in an unspecified amount. This dispute arises from JMP's engagement as the Company's financial advisor in July 2010, and the key issue in this dispute is the amount of the fee JMP is entitled to receive as a result of the closing of the common share issuance to an affiliate of Canon. Under governing agreements, the amount of JMP's fee differs depending upon whether the common share issuance is a "Sale or Merger" (defined to include an acquisition of a majority of voting securities of the Company) or whether it is a "Strategic Investment", and whether certain gross up provisions apply. The Company asserts that the correct fee amount is approximately $.8 million, while JMP asserts that the correct fee amount is approximately $2.3 million. The Company filed an answer to JMP's complaint and a motion to dismiss certain, but not all, claims in JMP's complaint, of which a motion is pending.

Charles Cheng Fee Dispute. On or about October 12, 2011, Altairnano filed a complaint against Zhiyuan (Charles) Cheng in the United States District Court in the Northern District of Nevada. Altairnano seeks a declaratory judgment that it owes Mr. Cheng no fee and seeks damages for breach of contract in an unspecified amount. The dispute arises from Mr. Cheng's engagement as a consultant to seek customers and strategic partners for Altairnano in China. Mr. Cheng has asserted in various communications that his efforts were significant in the arranging of the common share issuance with Canon and that, as a result, he is entitled to a $1.7 million fee in consideration of the closing of such transaction. Altairnano claims that Mr. Cheng is entitled to no fee, and that Altairnano is entitled to damages, as a result of Mr. Cheng's numerous breaches of material provisions of the agreement. Altairnano has filed the complaint, and Mr. Cheng has filed an answer denying key allegations of the complaint and a counterclaim seeking payment of the fee, and damages, under various theories. Mr. Cheng has joined Zhuhai Yintong Energy Company Ltd. (“YTE”) and Wei Yincang into the action by means of a complaint against them alleging a breach of an agreement between them and Mr. Cheng.

These disputed amounts are directly related to the Share Subscription Agreement with Canon. Management recorded a $4 million charge for these disputed amounts included in stock issuance costs within Equity.

Concentrations – We rely on certain suppliers as the sole-source, or as a primary source, of certain services, raw materials and other components of our products. We do not yet have long-term supply or service agreements engaged with any such suppliers. As a result, the providers of such services and components could terminate or alter the terms of service or supply with little or no advance notice. If our arrangements with any sole-source supplier were terminated, or if such a supplier failed to provide essential services or deliver essential components on a timely basis, failed to meet our product specifications and/or quality standards, or introduced unacceptable price increases, our production schedule would be delayed, possibly by as long as six months. Any such delay in our production schedule would result in delayed product delivery and may also result in additional production costs, customer losses and litigation.

An area in which our dependence upon a limited number of sources creates significant vulnerability is the manufacturing of our nano lithium titanate cells. As of the date hereof, we have two contract manufacturing sources for our nano lithium titanate cells. We have had quality issues with both contract manufacturers. Our nano lithium titanate battery cells are the building blocks of all of our products (other than our nano lithium titanate powder). If we continue to experience quality issues with our suppliers, we may be unable to meet our deadlines, or quality specifications, with respect to existing or future orders. This would harm our reputation and our ability to grow our business.

16. RELATED PARTY TRANSACTIONS

YTE (an affiliate of Canon) became a related party, as of July 21, 2011. Sales and cost of goods sold to YTE, from July 21, 2011 through December 31, 2011, amounted to $80,820 and $27,377, respectively. The sales and cost of goods sold to YTE, prior to July 21, 2011, amounted to $1.72 million and $2.3 million, respectively, which was recognized before the Share Subscription Agreement with Canon was completed. The receivable from YTE was zero, as of December 31, 2011.

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17. BUSINESS SEGMENT INFORMATION

Management views the Company as operating in two major business segments: Power and Energy Group, and All Other operations.

The Power and Energy Group develops, produces, and sells nano-structured lithium titanate spinel, battery cells, battery packs, multi-megawatt battery systems and provides related design and test services. The All Others group consists of the remaining portions of the previous Life Sciences and Performance Materials groups. Management completed a thorough review of operations and strategies and determined that it was in the best interests of the shareholders for the Company to focus primarily on the Power and Energy Group. As a result of this assessment resources devoted to the Performance Materials Group and Life Sciences Group were considerably reduced and no new significant development is being pursued in those areas by the Company. For all years presented, the activity relating to the Performance Materials and Life Sciences divisions have been reclassified into All Other.

Corporate assets consist primarily of cash, short term investments, and long-lived assets. Since none of the business units have reached cash flow break-even, cash funding is provided at the corporate level to the business units. The long-lived assets primarily consist of the corporate headquarters building, building improvements, and land. As such, these assets are reported at the corporate level and are not allocated to the business segments.

The accounting policies of these business segments are the same as described in Note 2 to the consolidated financial statements. Reportable segment data reconciled to the consolidated financial statements as of and for the fiscal years ended December 31, 2011, 2010 and 2009 is as follows:

In thousands of dollars:

	Net Sales	Loss (Gain) From Operations	Depreciation and Amortization	Assets
2011:				
Power & Energy Group	$ 4,503	$ 21,121	$ 1,248	$ 63,068
All Other	723	(71)	76	464
Consolidated Total	$ 5,226	$ 21,051	$ 1,324	$ 63,532
2010:				
Power & Energy Group	$ 6,156	$ 20,342	$ 1,680	$ 23,543
All Other	1,674	110	216	718
Consolidated Total	$ 7,830	$ 20,452	$ 1,896	$ 24,260
2009:				
Power & Energy Group	$ 3,249	$ 21,173	$ 1,504	$ 37,048
All Other	1,122	(375)	531	3,269
Consolidated Total	$ 4,371	$ 20,798	$ 2,035	$ 40,317

In the table above, expenses in the Loss from Operations column includes such expenses as business consulting, general legal expense, accounting and audit, general insurance expense, stock-based compensation expense, shareholder information expense, investor relations, and general office expense.

Additions to long-lived assets in 2011 consisted of $31,000 for the Power and Energy Group. In 2010 long-lived asset additions consisted of $138,000 for Corporate and $1,007,000 for the Power and Energy Group. In 2009 long-lived asset additions consisted of $211,000 for Corporate and $579,000 for the Power and Energy Group.

For the year ended December 31, 2011, we had sales to 2 major customers, each of which accounted for 10% or more of revenues. Total sales to these customers for the year ended December 31, 2011 and the balance of their accounts receivable at December 31, 2011 were as follows:

In thousands of dollars:

Customer	Sales - Year Ended December 31, 2011	Accounts Receivable at December 31, 2011
Power and Energy Group:		
Proterra, LLC	$ 2,109	$ -
Zhuhai Yintong Energy	$ 1,794	$ -

Our customer, Zhuhai Yintong Energy, became a related party customer upon the Canon close.

For the year ended December 31, 2010, we had sales to 3 major customers, each of which accounted for 10% or more of revenues. Total sales to these customers for the year ended December 31, 2010 and the balance of their accounts receivable at December 31, 2010 were as follows:

In thousands of dollars:

Customer	Sales - Year Ended December 31, 2010	Accounts Receivable at December 31, 2010
Power and Energy Group:		
Office of Naval Research	$ 2,559	$ 44
Proterra, LLC	$ 2,668	$ 359
All Other Division:		
US Army RDECOM	$ 1,320	$ 93

For the year ended December 31, 2009, we had sales to 4 major customers, each of which accounted for 10% or more of revenues. Total sales to these customers for the year ended December 31, 2009 and the balance of their accounts receivable at December 31, 2009 were as follows:

In thousands of dollars:

Customer	Sales - Year Ended December 31, 2009	Accounts Receivable at December 31, 2009
Power and Energy Group:		
Office of Naval Research	$ 1,198	$ 382
Proterra, LLC	635	117
BAE Systems	482	-
All Other Division:		
Spectrum Pharmaceuticals	$ 751	$ -

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Revenues for the years ended December 31, 2011, 2010 and 2009 by geographic area were as follows:

In thousands of dollars: Geographic information (a):		2011		2010		2009
United States	$	3,111	$	7,382	$	3,843
China		1,794		-		-
Canada		-		-		2
Other foreign countries		321		448		526
Total	$	5,226	$	7,830	$	4,371

All assets are held within the United States at December 31, 2011 with the exception of a Canadian cash account having a balance of $13,000 and $32,000 in raw material inventory located in South Korea at our cell contract manufacturer. All assets are held within the United States at December 31, 2010 with the exception of a Canadian cash account having a balance of $21,000 and $39,000 in raw material inventory located in South Korea at our cell contract manufacturers.

18. SUBSEQUENT EVENTS

In 2012, we plan to form one or more Wholly Foreign Owned Enterprises ("WFOE") in China. Our Board of Directors approved a business plan that included the expansion of business activities into China. We anticipate this expansion will allow us to participate in the fast-growing China market. We have decided to consolidate our operations, including closing our Reno, NV Corporate Headquarters and combining its corporate functions with our Anderson, IN facility, for greater efficiency and cost reductions.