APOLLO SOLAR ENERGY, INC. Form 10-K May 10, 2013

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

#### FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the fiscal year ended: December 31, 2012

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 0-12122

Apollo Solar Energy, Inc. (Exact name of registrant as specified in its charter)

Nevada 84-0601802 (State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

No. 485 Tengfei Third,
Shuangliu Southwest Airport Economic Development Zone,
Shuangliu, Chengdu
People's Republic of China, 610207
(Address of principal executive offices)

Registrant's Telephone Number, Including Area Code: +86 (28) 8562-3888

Securities Registered Pursuant to Section 12(b) of the Act: None Securities Registered Pursuant to Section 12(g) of the Act: Common Stock, \$.001 par value.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No ý

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 o No  $\circ$ 

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 ý No o

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 ( $\S232.405$  of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  $\circ$  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 Form 10-K or any amendment to this Form 10-K.

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer o

Non-accelerated filer o Smaller reporting company ý

(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 o No ý

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant on June 30, 2012 (the last business day of the registrant's most recently completed second fiscal quarter), was \$5,586,100 based on the closing price of the registrant's common stock on the OTC Bulletin Board of \$.30 per share.

There were 51,795,961 shares of common stock outstanding as of May 10, 2013.

DOCUMENTS INCORPORATED BY REFERENCE: None.

# APOLLO SOLAR ENERGY, INC.

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#### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The information contained in this Form 10-K, including in the documents incorporated by reference into this Form 10-K, includes some statements that are not purely historical and that are "forward-looking statements." Such forward-looking statements include, but are not limited to, statements regarding the Company and its management's expectations, hopes, beliefs, intentions or strategies regarding the future, including its financial condition, and results of operations. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipates," "believes," "continue," "could," "estimates," "expects," "intends," "may," "might," "plans," "possible," "potential," "predicts," "should," "will," "would" and similar expressions, or the negatives of such terms, may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements contained in this Form 10-K are based on current expectations and beliefs concerning future developments and the potential effects on our Company's business. There can be no assurance that future developments actually affecting us will be those anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements, including the following:

- · Vulnerability of our Company's business to general economic downturns;
- · Fluctuation and unpredictability of costs related to the precious metals and other commodities used to make our products;
- · Changes in the laws of the People's Republic of China, or the PRC, that affect our operations;
- · Competition from our competitors;
- · Any recurrence of earthquakes in the areas where we operate;
- Our ability to obtain all necessary government certifications and/or licenses to conduct our business;
- · Development of a public trading market for our securities;
- The cost of complying with current and future governmental regulations and the impact of any changes in the regulations on our operations;
- · Fluctuation of the foreign currency exchange rate between U.S. Dollars and Renminbi, or RMB, the lawful currency of China; and
- The other factors referenced in this Form 10-K, including, without limitation, under the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business."

These risks and uncertainties, along with others, are also described below under Item 1A, "Risk Factors." Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to

update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

Unless the context otherwise requires, the terms "we," the "Company," "us," or "Apollo" refers to Apollo Solar Energy, Inc. and our wholly-owned subsidiaries and variable interest entities.

#### PART I

#### ITEM 1. BUSINESS

#### Overview

We are a China-based vertically integrated refiner of tellurium ("Te") and high-purity tellurium-based metals for specific segments of the electronic materials market. Our main expertise is in the production of Te-based compounds used to produce thin-film solar cells, cell modules and solar electronic products. While no reserves under the SEC's Industry Guide 7 can currently be delineated at our properties, we believe that the tellurium to be used in our products in the future will be primarily sourced from our Dashuigou project located in Sichuan Province, PRC. In addition, we expect to source tellurium from another property in Shimian, Majiagou, PRC, through variable interest entity agreements, or the VIE Agreements, executed in April, 2009, with Sichuan Xinju Mineral Resources Development Corporation and certain of its shareholders holding 51.6619% of its voting stock, which shareholders are our direct or indirect employees. Under the terms of the VIE Agreements, we have been granted the exclusive exploration and mining rights to these two projects in accordance with a license granted by the Chinese government, which extends through January, 2014 for exploration and mining activities at our Dashuigou property, and through May 2013 for mining activities at our Majiagou property. The licenses are subject to potential renewal at their termination date, and our license for the Majiagou property has already been pre-approved by the government for renewal.

Currently, tellurium is produced as a by-product in the process of processing copper and other metals. As a result, costs are high. We believe that the Dashuigou and Majiagou projects are the only two known deposits in the world in which tellurium, one of the rarest metallic elements on earth, is the primary commodity of economic interest. We had planned to begin mining at Dashuigou in 2012, but were delayed by new mining regulations adopted by the local government. We have achieved compliance with the new regulations, and an indication from the local government that we are approved for mining. By the end of 2014, therefore, we plan to obtain approximately 50% to 60% of the tellurium necessary for our products from the Dashuigou, Majiagou and other projects and believe this ability to be a significant competitive advantage because the cost of tellurium sourced from our own properties will be substantially lower than that purchased from an outside third party. We will source the remaining 40% to 50% of our tellurium needs from third-party suppliers with whom we have established good business relationships over the past few years. By vertically integrating our processes, we believe we are able to achieve significant operating efficiencies and produce high-quality products that offer cost and quality benefits to our customers.

Our refining operations are currently based in a 330,000 square foot facility in Chengdu, Sichuan Province, PRC. We expect this facility to eventually have the capacity to produce more than 300 tons of high-purity photovoltaic cell materials and 42 other types of electronic materials. Future expansion of this facility in vacant land leased to the Company will have a capacity to produce up to an additional 350 tons of high-purity photovoltaic cell materials.

In November 2009 we entered into a joint venture to produce thin film solar cells. Our principal joint venture partner is Bengbu Design & Research Institute for the Glass Industry, which is an affiliate of China National Building Materials Group, a giant state-owned entity. A local government agency also owns an equity interest in the joint venture. In exchange for our contribution of land and facilities as well as three patents, we received a 35% equity interest in the joint venture, which is named CEO Apollo Solar. At present, COE Apollo Solar is engaged in research regarding glass used in production of thin film solar cells, and is developing a production line for 80MW CdTe thin film solar modules. COE Apollo Solar has obtained the requisite government licenses, and expects to initiate construction of the assembly line during 2013, with completion scheduled for 2014.

We are currently in the exploration stage of operations in accordance with the requirements of SEC Industry Guide 7. However, we believe we are unique in that we expect to both mine and refine our tellurium-based products, with primary refining capabilities as provided by Sichuan Xinju Minteral Resources Development Corporation pursuant to the VIE Agreements, and secondary refining capabilities directly through our Company. Our primary refining capabilities are such that we can treat metal concentrates (containing, for example, as little as 50% of the metals of interest), and extract and refine the metals of interest so that they can be fed to our secondary refining operations, where we attain a higher level of purity. Because we expect to mine the raw material in the future, and perform both refining functions, both directly and through our VIE Arrangement, we consider ourselves a supplier that will in the future have uniquely integrated capabilities. Our end-products are tellurium, cadmium, zinc and related compounds of 99.999% (five nines, or 5N) purity or above. Our products are critical precursors in a number of electronic applications, including the rapidly-expanding thin-film photovoltaic, or PV, market.

Thin film technologies, because of their relatively low usage of raw materials when compared with traditional silicon-based photovoltaic technologies, offer a potential cost advantage in the marketplace. Accordingly, we believe these technologies are beginning to gain an ever increasing foothold in the market.

# Our Variable Interest Entity Agreements

As illustrated in the diagram below, we entered into various exclusive contractual arrangements on April 10, 2009 with Sichuan Xinju Mineral Resources Development Corporation (the "VIE") and certain of its shareholders who are our direct or indirect employees and who collectively own 51.6619% of the VIE. Among other things, these VIE Agreements granted to our wholly-owned subsidiary a first option to purchase the exploration rights related to the Dashuigou area property and the mining rights related to that certain tellurium and bismuth property in Shimian Majiagou, which rights we collectively referred to as the Exploration Business. Additionally, the VIE and certain of its shareholders who collectively own 51.6619% of the VIE granted to our wholly-owned subsidiary an exclusive right to purchase all of the products produced from the Exploration Business for a specified period of time. As a result, we consolidate the financial results of the VIE related to the Exploration Business pursuant to FASB ASC 810-10, "Consolidation."

(1) Agreements that provide us with effective control over Sichuan Xinju Mineral Resources Development Co. Ltd., or the VIE, include a purchase option agreement, a business operations agreement and an exclusive technical and consulting agreement.

The agreements between the VIE and our other affiliated entities or persons are summarized below:

First Option Exclusive Acquiring Agreement among Sichuan Xinlong Tellurium Industry & Technique Co., Ltd., Sichuan Xinju Mineral Resources Development Co., Ltd., Renyi Hou and Ling Yong, which grants to our wholly-owned subsidiary a first option to purchase the Mining Business at such time as the purchase becomes advisable, permissible and in our best interest.

- · Exclusive Sales Agreement between Sichuan Xinlong Tellurium Industry & Technique Co., Ltd. and Sichuan Xinju Mineral Resources Development Co., Ltd., which grant to our wholly-owned subsidiary the exclusive right to buy all of the output of the Mining Business.
- Business Operation Agreement among Sichuan Xinlong Tellurium Industry & Technique Co., Ltd., Sichuan Xinju Mineral Resources Development Co., Ltd., Renyi Hou and Ling Yong, which imposes certain restrictions and obligations on the VIE and certain of its shareholders to support the VIE arrangement, including refraining from competing with our business and modifying the business operations of the VIE without the prior consent of our wholly-owned subsidiary.
- Exclusive Technical and Consulting Agreement between Sichuan Xinlong Tellurium Industry & Technique Co., Ltd. and Sichuan Xinju Mineral Resources Development Co., Ltd., which requires the VIE to provide certain technical and consulting services exclusively to our wholly-owned subsidiary in connection with the Mining Business. Our wholly-owned subsidiary agrees to provide up to \$6.0 million in investing funding to the VIE in connection with its operation of the Mining Business, on such terms as the parties shall agree from time to time.

## Renewable Energy Industry

The demand for electricity is steadily increasing as the worldwide economy continues to grow. Global electric power generation is expected to reach 25,000 terawatt hours, or TWh, annually by 2020, according to the Energy Information Administration, or the EIA, of the United States government, up from 17,000 TWh in 2005. Fossil fuels account for approximately 65% of the world's supply of electricity. However, fossil fuels face a number of challenges that limit their availability and result in significant price pressures. The limited availability and rising cost of fossil fuels have stimulated the development of renewable energy technologies and created, in our view, a significant business opportunity.

Renewable energy sources for electric power generation include hydroelectric, biomass, geothermal, wind and solar. Among renewable sources of electricity, we believe solar energy has the most potential to meet the world's growing electricity needs. According to the U.S. Department of Energy, the sun is the only source of renewable energy that has a large enough resource base to meet a significant portion of the world's electricity needs. A study commissioned in 2002 by the U.S. Department of Energy estimated that, on average, 120,000 trillion Watts, or TW, of solar energy strike the Earth per year, far exceeding the global electricity consumption rate of 14.3TW. At typical latitude for the United States, a net 10% efficient solar energy "farm" covering 1.6% of the U.S. land area could theoretically meet the country's entire domestic electricity needs.

# Thin Film Photovoltaic Technologies

Solar electricity is generated using either photovoltaic or solar thermal technology to extract energy from the sun. Photovoltaic, or PV, electricity generating systems directly convert the sun's energy into electricity, whereas solar thermal systems heat water or other fluids that are then used as sources of energy. PV systems are either grid-connected systems or off-grid systems. Grid-connected systems are connected to the electricity transmission and distribution grid and feed solar electricity into the end-user's electrical system and/or the grid. Such systems are commonly mounted on the rooftops of buildings, integrated into building facades or installed on the ground using support structures, and range in size from 2-3 kilowatts to multiple MWs. Off-grid PV systems are typically much smaller and are frequently used in remote areas where they may be the only source of electricity for the end-user. PV

systems are currently the most widely used method of transforming sunlight into electricity.

Approximately 80% of PV-generated electricity is currently produced using traditional crystalline silicon. This technology requires a significant amount of high-purity silicon. The increase in PV production has resulted in a shortage of this type of silicon, adversely affecting PV growth and costs. Recently, because of over-capacity in silicon wafer, cost of traditional PV has come down significantly. However, thin-film technologies based on either amorphous silicon or Cadmium telluride (CdTe) are rapidly being phased into production because of their potential for further lowering the cost of PV modules. This is largely due to the fact that thin-film-based modules, as their name implies, consume much smaller amounts of the starting materials, typically only 1% compared to crystalline silicon, and also because they are produced using a continuous manufacturing process which is mass production proven. Additionally, thin film technologies are inherently free from the supply constraints associated with traditional silicon-based photovoltaic technologies, thus offering additional cost advantage in the marketplace. Accordingly, we believe these technologies are beginning to gain a foothold in the market.

## Strategy

We seek to become a leading global provider of both high-purity metals and PV products by taking advantage of our high degree of vertical integration, which we believe will yield economies of scale and cost savings. We consider ourselves uniquely positioned in China among suppliers of high-purity materials because of our exclusive access to the Dashuigou and Majingou mines.

Our strategy includes the following key elements:

- Leverage our cost base. We believe the technical improvements resulting from our research and development efforts have been instrumental in significantly reducing our production costs and increasing our operational efficiency. As we source more tellurium internally, we believe we will be able to achieve significantly higher profit margins than our competitors. We intend to utilize this cost advantage to attract both new customers and larger orders from existing customers.
- Increase production capacity. In May 2008, we relocated our operations to a new 330,000 square foot facility in Chengdu, PRC and launched an aggressive expansion project to increase our annual production capacity of high-purity materials to 1,000 tons. Among these 1,000 tons, we plan to increase our capacity to produce tellurium and cadmium telluride. We will continue to closely monitor the progress of this expansion project to avoid risks of over-expansion, while evaluating other available expansion opportunities. We believe expansion of our production capacity is likely to result in greater economies of scale for our operations.
- Penetrate new market segments. Our current key markets are the United States and China, which represented our two largest markets based on revenues in 2012. We are seeking to increase sales in the United States and Japan and to expand into selected countries in Europe, where we believe the PV market is likely to grow significantly in the near term. For example, we entered into 6N sulfur supply contracts with several German companies, including Sulfurcell Solartechnit GmbH, during the last several years. We believe the visibility of our brand name in Germany will help us expand into our new targeted markets in Europe. We also plan to hire additional sales agents to be based in Europe and the Middle East to provide services to our customers in those markets.
- Expand market share in China. Although the PV market in China is currently smaller than other major PV markets, we believe that the adoption of a series of new laws, regulations and initiatives by the PRC government, including the PRC's Renewable Energy Law, the Supervision Regulations on the Purchase of All Renewable Energy by Power Grid Enterprises, the National Medium- and Long-Term Programs for Renewable Energy and the recent amendments to the PRC Energy-Saving Law demonstrates the PRC government's commitment to develop renewable energy sources and may lead to rapid growth in the PV market in China. As a leading supplier of high-purity materials in China, we believe we are well-positioned to capitalize on this growth and capture a significant portion of China's thin-film PV market.

#### **Products**

We produce and sell a range of metals and compounds to address the requirements of our customers in the various electronic materials market segments. Our range of products and their typical end-uses are as follows:

· Ultra-High Purity Tellurium. These include tellurium in purity levels of 99.999% (5N) to 99.9999% (7N) or more. High purity tellurium is used to manufacture radiation and infrared detectors;

- · CdTe Thin Film Compounds. These are tellurium-based compounds in purity levels ranging from 99.999% (5N) to 99.9999% (6N). These products are primarily used in the production of thin-film solar electric power modules; and
- Other Commercial-Purity Metals. These include tellurium, selenium, antimony, bismuth, cadmium and zinc in purities ranging from 99.99% (4N) to 99.9999% (6N). These metals find applications in numerous electronic material market segments, including PV, radiation detector, and infrared detection.

#### **Customers and Main Markets**

Our principal customers are manufacturers of thin-film solar cells, cell modules, and solar electronic products. We also serve additional customers involved in various segments of other electronic materials markets. In 2012 28% of our sales were to two customers: Lianlian Industry Co., Ltd. (15%) and Weilin Chemical Co., ltd. (13%), both of which are located in China. In 2011, approximately 45% of our sales were to three customers: Zhuzhou Jingchang Technology (20%), Redlen Technology (13%) and First Solar (12%). We expect our sales to continue to be concentrated among a small number of customers. However, we also expect that our significant customers may change from time to time.

In 2012, 95% of our sales were made to customers in China, due to a dramatic drop in international demand. Industry sources have indicated to us that potential North American customers have experienced delays in the development of CdTe based thin film PV panels, which has reduced potential demand for our products in North American. We believe that this softening of demand may last for another year or so. In 2011, 72.3 % of our sales were made to customers in Asia, 27% of our sales were made to customers in North America and 0.7% of our sales were made to customers in the rest of the world. In 2010, 31.7% of our sales were made to customers in Asia and 66.8% of our sales were made to customers in North America.

In general, we enter into monthly or semi-annual contracts with customers, most of which are domestic. Our contracts with major customers are non-cancelable and provide for minimum levels of product sales for the duration of the contract (typically 6 to 12 months) with the potential for higher sales levels depending on such factors as rising market prices, customer's needs, our available capacity and/or our ability to reach agreement on key terms. Our standard terms for customers require payment 30 days after delivery, although new customers are required to pay on delivery, and some special customers (such as research institutions) are granted 90 to 120 days to make payment due to the complexity of their internal approval procedures. Customers with such extended payment terms represent less than five percent of our sales volume.

#### Competition

We face competition from producers of raw materials such as Vital Chemicals Co., Xiandao (Qingyuan) Rare Metal and Chemical Co., and Emei Semiconductor Material Co. in China. Overseas we face competition from 5N Plus, Inc. in Canada, Honeywell Electronic Materials in the United States, PPM Pure Metals in Germany and Nikko Materials in Japan. As solar opportunities grow, new entrants are likely to enter the market and our existing customers may begin to backwards integrate. It is also likely that our current suppliers, who are large non-ferrous mining, refining and metal processing companies, will begin to vertically integrate as well. We believe that our complete vertical integration as both a miner and refiner will uniquely positions us to compete effectively.

We believe that we possess significant competitive advantages. These advantages include:

Well-Established Market Position and Significant Barriers to Entry. We believe that we are one of the main suppliers of cadmium, selenium, and tellurium metal and compounds in the markets that we serve. We believe we have a limited number of competitors due to the highly specialized nature of our business. The niche markets we serve require extensive expertise and know-how. Our products must be qualified by customers after long periods of testing. Most of the materials that we produce must also be handled with care because of their environmental and occupational impact, and must be recycled, all of which constitute significant entry barriers for potential competitors.

- · Key Supplier in the Fast-Growing CdTe PV Industry. We are one of the key suppliers of Te to the PV industry. A significant increase in CdTe-based PV production capacity is expected over the next few years and we believe that we are well positioned to be an active participant in the growth of the industry.
- Stable Stream of Future Revenue. As we have exclusive access to tellurium, this will help us to provide a stable and constant stream of supplies to our customers. Therefore, we anticipate that we will be able to negotiate with our major customers in the future for long-term supply agreements which will lead to stable stream of revenue in future years.
- Stable Supply of Critical Raw Materials at Competitive Pricing. We have the access to our own tellurium mines and to other sources of feedstock materials that we require. We consider ourselves uniquely positioned in China among suppliers of high-purity materials because of our exclusive access to the Dashuigou and Majiagou mines. We believe we can yield economies of scale and cost savings and thus offer highly competitive pricing to our customers.

## Sales and Marketing

We market and sell our products primarily through our direct sales force to customers in North America, Japan, the rest of Asia, and Europe. Our sales team consists of eight in-house sales managers and one sales director. Our direct sales force includes experienced and technically sophisticated sales professionals and engineers who are knowledgeable in photovoltaics and the various applications in which our products are used. Our sales staff works with customers during all stages of the manufacturing process, from developing the precise composition of the compound through manufacturing and processing to the customer's exact specifications. We have also appointed CERAC, Inc. to be our exclusive distributor for the North American market, excluding sales to First Solar. However, with the softening of demand as delays from new producers occurred, the contribution from this agreement may not be as high as expected.

A key component of our marketing strategy is developing and maintaining strong relationships with our customers, especially at the senior management level. We seek to achieve this through working closely with our customers to optimize our products for their production processes. In addition, we believe we are able to develop long-term relationships with key customers by offering competitive pricing, delivering high quality products and providing superior customer service. We believe that maintaining close relationships with senior management and providing necessary customer support improves customer satisfaction and provides us with a competitive advantage when selling our products.

In order to increase brand recognition of our products and of Apollo in general, we publish technical articles, advertise in trade journals, distribute promotional materials and participate in industry trade shows and conferences.

## Research and Development

We plan to continue to devote a substantial amount of our resources to research and development with the objective of improving our mining output efficiency, and optimizing our extraction and refining steps. We will primarily focus our research and development in the following areas:

· Mining output efficiency. Mining is becoming increasingly sophisticated, with some mines now using smart sensors to identify areas to prospect, guide sophisticated

equipment used in extracting minerals, and monitor air quality in mines. We are consistently seeking new technologies and techniques to raise efficiency at the Dashuigou and Majiagou mines while concurrently seeking to improve environmental and safety conditions.

Mineral processing and refining. We are focusing our efforts on the optimization of both our front-end and back-end processes, namely our primary hydrometallurgical extraction and refining steps (leaching, solid liquid separation and electrowinning), as well as our secondary high-purity refining steps (vacuum distillation and zone refining).

As of December 31, 2012, our research and development team consists of 26 full-time employees, which are broken down into four groups:

- · Mineral resources prospecting and development, 20 engineers;
- · Mineral processing, metallurgy, new materials, 2 engineers;
- · New energy development, 3 engineers; and
- · Geologists, 1.

Additionally, we have strategic research and development collaborations with various universities including Sichuan University, Chengdu Electronic Engineering University, Chengdu Polytechnic University, Shanghai Technical Physics Institute and China Nonferrous Metal Research Institute.

On March 16, 2010, we entered into a Joint Research Agreement with the New Jersey Institute of Technology ("NJIT"), pursuant to which we agreed to pay NJIT sponsorship funds in an aggregate amount of \$1,500,000 over a three-year period. Under the terms of the Agreement, NJIT agreed to provide certain laboratory instruments, equipment and personnel to develop novel CdTe thin film PV technology. Through June 2012, the Company had paid US\$500,000 in sponsorship fund to NJIT and had accrued an obligation of \$625,000, all of which was recorded as Research & Development expense. In July 2012, however, NJIT terminated our agreement and asserted that we had acquired no rights to intellectual property developed during the term of the agreement.

In 2012, after our relationship with NJIT terminated, China National Building Material Group commenced a joint venture with the NJIT Solar Research Center, which was renamed "CNBM-NJIT PV Material Research Center" in February 2013. The Center continues to engage in research regarding high purity metals and PV materials, the benefits of which should inure to CEO Apollo Solar, our joint venture with an affiliate of China National Building Material Group.

# Intellectual Property

Our success depends, in part, on our ability to maintain and protect our proprietary technology and to conduct our business without infringing on the proprietary rights of others. As of December 31, 2012, we held sixteen Chinese patents with respect to our proprietary refining techniques and had an additional three patent applications pertaining to elements of our unique thin-film solar module manufacturing process pending. In 2010, the Company transferred three patents to the Joint Venture with an approximate appraised value of RMB13, 781,300.

With respect to proprietary know-how that is not patentable and processes for which patents are difficult to enforce, we rely on, among other things, trade secret protection and confidentiality agreements to safeguard our interests. All of our research and development personnel have entered into confidentiality and proprietary information agreements with us. These agreements address intellectual property protection issues and require our associates to assign to us all of the inventions, designs and technologies they develop during the course of employment with us. We also require our customers and business partners to enter into confidentiality agreements before we disclose any sensitive aspects of our refining techniques, solar modules, technology or business plans.

#### Safety Performance

We have received no reports of occupational injuries or other safety accidents with respect to its operations since we received our Safe Production License from the Chinese government on April 11, 2006. We have a production staff of

12 persons in Dashuigou that are supervised by our Safety Production Committee, which reports directly to our management team. We have also adopted safety production guidelines and procedures that require every member of our production staff to participate in specific safety training programs and to obtain a safety working permit issued by the local governmental authorities prior to commencing such work. Additionally, we provide an annual internal training program to all our employees that details our safety measures and emergency recovery programs currently in place. Each of our employees is covered by a special occupational and health insurance program, and undergoes a regular physical examination.

## **Environmental Regulations**

Our Dashuigou and Majiagou mines and high purity material manufacturing facilities are subject to various pollution control regulations with respect to noise, water and air pollution and the disposal of waste and hazardous materials. The basic laws in China governing environmental protection in the mineral industry sector of the economy are the Environmental Protection Law, the Environment Impact Assessment Law and the Mineral Resources Law. The State Administration of Environmental Protection and its provincial counterparts are responsible for the supervision, implementation and enforcement of environment protection laws and regulations. Provincial governments also have the power to implement rules and policies in relation to environmental protection in their respective jurisdictions.

Our material purification process generates gaseous wastes, liquid wastes, waste water, noise and other industrial wastes in various stages of the manufacturing process. We have installed various types of anti-pollution equipment in our production facilities to reduce and treat the wastes generated in our manufacturing process. Our operations are subject to regulation and periodic monitoring by the State Environmental Protection Bureau of the PRC, as well as local environmental protection authorities. The PRC national and local environmental laws and regulations impose fees for the discharge of certain waste substances. If discharges exceed the prescribed levels, excess discharge fees are charged. The PRC national and local governments may at their own discretion assess fines, close or suspend the operation of any facility that fails to comply with orders requiring it to cease or remedy activities causing environmental damage. No such penalties have been imposed on us, and we believe that we have been in material compliance with applicable environmental regulations and standards.

We have obtained the land use permit and the water and soil preservation permit for the Dashuigou and Majiagou mines. We also received ISO 9001:2008 and GB/T19001-2008 certificates which are valid from December, 2011 until December, 2014. This Quality Management System applies in the areas of design, development and production of certain metals and high purity compounds.

## Government Regulations

The following is a summary of the principal governmental laws and regulations that are or may be applicable to our operations in the PRC. The scope and enforcement of many of the laws and regulations described below are uncertain. We cannot predict the effect of further developments in the Chinese legal system, including the promulgation of new laws, changes to existing laws or the interpretation or enforcement of laws.

# Renewable Energy Law and Other Government Directives

In February 2005, the PRC enacted its Renewable Energy Law, which became effective on January 1, 2006. The Renewable Energy Law sets forth policies to encourage the development and use of solar energy and other non-fossil energy. The renewable energy law sets forth the national policy to encourage and support the use of solar and other renewable energy and the use of on-grid generation. It also authorizes the relevant pricing authorities to set favorable prices for the purchase of electricity generated by solar and other renewable power generation systems.

The law also sets forth the national policy to encourage the installation and use of solar energy water-heating systems, solar energy heating and cooling systems, solar photovoltaic systems and other solar energy utilization systems. It also provides financial incentives, such as national funding, preferential loans and tax preferences for the development of renewable energy projects. In January 2006, China's National Development and Reform Commission promulgated two implementation directives of the Renewable Energy Law. These directives set forth specific measures in setting prices for electricity generated by solar and other renewable power generation systems and in sharing additional expenses incurred. The directives further allocate the administrative and supervisory authorities among different government agencies at the national and provincial levels and stipulate responsibilities of electricity grid companies and power

generation companies with respect to the implementation of the renewable energy law.

In November 2005, the PRC's National Development and Reform Commission promulgated the Renewable Energy Industry Development Guidance Catalogue, where solar power figured prominently. In January 2006, the PRC's National Development and Reform Commission promulgated an implementation directive for the renewable energy power generation industry. This directive sets forth specific measures for setting the price of electricity generated by solar and other renewable power generation systems and in sharing the costs incurred. The directive also allocates administrative and supervisory authority among different government agencies at the national and provincial levels and stipulates the responsibilities of electricity grid companies and power generation companies with respect to the implementation of the renewable energy law.

On August 31, 2007, the PRC's National Development and Reform Commission promulgated the Medium and Long-Term Development Plan for the Renewable Energy Industry. This plan sets forth national policy to provide financial allowance and preferential tax regulations for the renewable energy industry. A similar demonstration of PRC government commitment to renewable energy is also stipulated in the Eleventh Five-Year Plan for Renewable Energy Development, which was promulgated by the PRC's National Development and Reform Commission in March 2008.

The principal regulations governing the mining business in the PRC include:

- · China Mineral Resources Law, which requires a mining business to have exploration and mining licenses from provincial or local land and resources agencies;
- · China Environmental Law, which requires a mining project to obtain an environmental feasibility study of the project; and
- · China Mine Safety Law, which requires a mining business to have a safe production license and provides for random safety inspections of mining facilities.

Chinese regulations also require that a mining company have a safety certification from the PRC Administration of Work Safety before it can engage in mining and extracting activities. All of our operating subsidiaries have obtained the necessary licenses and certifications.

#### Insurance

We have personal injury insurance for our employees and management under a group insurance policy with Ping An Life Insurance Company of China, Ltd. The insurance coverage for our employees includes accidental injury, medical cost for accidental injury, and hospital allowance for accidental injury. In addition to coverage for our employees, insurance for management covers extra car and airplane-related accidents.

# Income Tax

The corporate income tax rate applicable to all companies organized in the PRC, including both domestic companies and foreign-invested companies, is 25%. On July 16, 2009, one of our wholly owned subsidiary, Sichuan Xinlong received PRC government approval on the High-Tech Enterprise Certificate which allowed us to enjoy a favorable tax rate of 15% effective January 1, 2009 and through December 31, 2011. The national tax rate of 25% will be applied to Sichuan Xinlong from January 1, 2012.

## **Employees**

We employ 92 people. Of our employees, 61 hold university degrees in engineering or physical sciences. A breakdown of our current personnel by category is as follows:

Production	34
Research and Development	26
Administration	18
Sales and Marketing	10
Senior Management	4
Total	92

#### ITEM 1A: RISK FACTORS

Any investment in our common stock involves a high degree of risk. Potential investors should carefully consider the material risks described below and all of the information contained in this Form 10-K before deciding whether to purchase any of our securities. Our business, financial condition or results of operations could be materially adversely affected by these risks if any of them actually occur. Some of these factors have affected our financial condition and operating results in the past or are currently affecting our company. This filing also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced described below and elsewhere in this Form 10-K.

#### Risks Related To Our Operations

We have accumulated significant losses and we may not be able to generate significant revenue or any net income in the future, which would negatively impact our ability to run our business.

We have accumulated significant net losses from our inception through December 31, 2012 and we may be unable to generate significant revenue or any net income in the future. We cannot predict when, or if, we will become profitable in the future. Even if we achieve profitability, we may not be able to sustain it. We have funded our operations primarily through the issuance of equity and debt securities to investors and may not be able to generate a positive cash flow in the future. If we are unable to generate sufficient cash flow from operations, we will need to seek additional funds through the issuance of additional equity or debt securities or other sources of financing. We may not be able to secure such additional financing on favorable terms, or at all. Any additional financings will likely cause substantial dilution to existing stockholders. If we are unable to obtain necessary additional financing, we may be required to reduce the scope of, or cease, our operations.

Our limited operating history may not serve as an adequate basis to judge our future prospects and results of operations.

We commenced our current line of business operations in 2006. Our limited operating history may not provide a meaningful basis on which to evaluate our business. We expect that our operating expenses will increase as we expand. Any significant failure to realize anticipated revenue growth could result in significant operating losses. We will continue to encounter risks and difficulties frequently experienced by companies at a similar stage of development, including our potential failure to:

raise adequate capital for expansion and operations;

implement our business model and strategy and adapt and modify them as needed;

increase awareness of our brands, protect our reputation and develop customer loyalty;

manage our expanding operations and service offerings, including the integration of any future acquisitions;

maintain adequate control of our expenses;

anticipate and adapt to changing conditions in the renewable energy market in which we operate as well as the impact of any changes in government regulations, mergers and acquisitions involving our competitors, technological developments and other significant competitive and market dynamics.

If we are not successful in addressing any or all of these risks, our business may be materially and adversely affected.

Uncertainty in the results of exploration for resources.

Resources and reserves are non-renewable and the exploration of new potential resources is crucial to a mining enterprise. Exploration of mineral resources is speculative in nature, so substantial expenses may be incurred from initial drilling to production. As tellurium is the ninth rarest element on earth and the Dashuigou and Majiagou tellurium mines are the only two tellurium mines known to date, there is also no assurance that exploration can lead to the discovery of new mines or economically feasible reserves. Although the exploration is not the main business of the Company, we expect to continue to search for new tellurium mines. If the Company fails to replenish its mineral resource levels in existing or new mining areas, the Company may not be able to maintain the current production level after the remaining usable life of the existing mining areas.

Fluctuation in the market price of base metals may significantly affect the results of our operations.

The results of our operations are significantly affected by the market price of base metals, which are subject to substantial price fluctuations. Our earnings are particularly sensitive to changes in the market price of tellurium, cadmium, and other metals that we sell. Market prices can be affected by numerous factors beyond our control, including supply and demand for a broad range of industrial reasons, substitution of new or different products in critical applications for our existing products, expectation with respect to the level of fossil fuel price, and speculative activities. If prices should decline below our cash costs of production and remain at such levels for any substantial period, we could determine that it is not economically feasible to continue commercial production at any or all of our mines.

As tellurium is rare and its applications highly specific, there is no known hedging tools for us to utilize to protect us against price fluctuation. As such, our ability to protect our operations performance due to base metal price fluctuation is minimal.

We may face restricted access to markets in the future.

Access to our markets may be subject to ongoing interruptions and trade barriers due to political interference, tariffs imposed by of individual countries, and the actions of certain interest groups to restrict the import of our commodities. Although there are currently no significant trade barriers existing or impending of which we are aware that do, or could, materially affect our access to certain markets, there can be no assurance that our access to these markets will not be restricted in the future.

We may not be able to renew the current license period of mining rights.

Under the PRC's Mineral Resources Law, all mineral resources of the PRC are owned by the State. The Company may obtain mining rights for conducting mining activities in a specific mining area during the license period. The Company has, under the relevant laws and regulations, and through the VIE Arrangement, obtained valid mining rights to the Dashuigou and Majiagou mines with a validity period of 6 years and may apply to the relevant authorities for extension. The Company will not be able to exploit the entire mineral resources of the mines during the license period. If the Company fails to renew its mining rights upon expiration of the license term, or it cannot effectively utilize the resources within a license period specified in the mining right, the operation and performance of the Company will be adversely affected.

Our performance relies on the operations of two existing mines.

Our principal operating assets are the Dashuigou and Majiagou tellurium mines. We expect a substantial portion of our revenues to be generated from these two mines in the future, both of which are still in development stage. There is

no assurance that these, or any of our other developing mineral projects, will perform satisfactorily. If any of our developing mineral projects fail to perform satisfactorily, this may lead to a decrease in the overall profit margin, operating performance and investment return, and may adversely affect our operating results.

#### Production safety.

We employ the open pit mining method for our two mines. Due to the geographic setting and relatively high elevation difference, there is a possibility of localized mud-rock flow during the rainy season, and a risk of instability of the slopes and subsidence of the working area. As the mining process requires the use of explosives and sodium cyanide, any improper storage or use of these materials could lead to injury or death.

Another earthquake in the region may have negative impact on the operations of our mines and therefore our performance.

A major earthquake measuring 8.1 on the Richter scale took place in the Sichuan province in May, 2008. If such an earthquake were to take place again, the facilities in our mines could be damaged, lead to injury and death of employees, and the complete halt to our mining activities.

Government regulation of the mining industry.

Our mining production is subject to various government policies and regulations in China relating to exploration, development, production, taxation, labor standards, vocational health and safety, waste treatment, environmental monitoring, protection and control, operations management and other problems. Any changes to these policies and regulations may increase our operating costs and may adversely affect our operating results.

The loss of, or a decrease in the amount of business from, our major customers or any default in payment on their part could significantly reduce our net sales and harm our operating results.

In 2012, 28% of our sales were made to two customers. In 2011, approximately 45 % of our sales were to three customers. In 2010, our top three customers accounted for 75% of our revenue. In 2009, approximately 90% of sales were to two customers. We have been committing tremendous effort to expanding our customer list, and our results in 2011 reflected a certain level of success. However, the loss of, or a decrease in the amount of business from, one of these customers, or any default in payment on their part, could still significantly reduce our net sales and harm our operating results. For example, First Solar had been our largest customer in 2009 and 2010. In 2011, however, we found our relationship with First Solar to be economically unfavorable and, by mutual agreement, terminated the relationship in the first quarter of 2012, after sales to First Solar diminished significantly in 2011.

We have no assurance of securing additional business from our major customers beyond our long-term supply agreements. We therefore expect that our dependence on our major customers will continue during most of 2013, at which point we intend to further reduce our reliance on our major customers by expanding our production capacity to meet the needs of currently merging manufacturers of CdTe-based PV modules, as well as to supply the needs of companies active in the medical imaging market.

We may not be able to effectively control and manage our growth.

If our business and markets grow and develop, it will be necessary for us to finance and manage expansion in an orderly fashion. In addition, we may face challenges in managing and expanding facilities and in integrating acquired businesses with our own. Such eventualities will increase demands on our existing management, workforce and facilities. Failure to satisfy such increased demands could interrupt or adversely affect our operations and cause longer operation location completion cycle, and administrative inefficiencies.

We depend on market acceptance of our customers' products and the technology associated therewith.

We depend on market acceptance of our customers' products and the technology associated therewith. Any delay or failure by our customers to successfully penetrate their respective markets could lead to a reduction in our sales and operating margins. Most of our products are sold either into emerging markets or alternatively in existing markets, for which they are used to manufacture replacement products intended to represent new and improved technologies. If our customers are unable to meet the performance and cost targets required for commercial viability, their products are subject to regulations which limit their use, or the new or improved technology associated with their products proves unsuitable for widespread adoption, it may have an adverse effect on our sales and operating margins.

More specifically, a significant part of our sales are made in the solar energy market using thin-film technology. Thin-film technology does not have a sufficient operating history to confirm how PV modules will perform over their estimated useful life of 25 years. Long-term viability of CdTe-based thin film technology will also depend on the manufacturers' ability to reduce the cost of PV modules to a level at which the technology is competitive with other energy sources without government subsidies. If thin-film technology performs below expectations or if it does not achieve cost competitiveness with conventional or other solar or non-solar renewable energy sources without government subsidies, it could result in the failure of the technology to be widely adopted in the market. This could significantly affect demand for our products and reduce our sales and profit margins.

Many other factors may affect the widespread adoption of PV technology and demand for our customers' products, including the following:

- cost-effectiveness of thin film PV modules compared to conventional and other non-solar renewable energy sources and products;
- performance and reliability of thin film PV modules and thin-film technology compared to conventional and other non-solar renewable energy sources and products;
- · availability of government subsidies and incentives to support the development of the solar energy industry;
- success of other renewable energy generation technologies, such as hydroelectric, wind, geothermal, solar thermal, concentrated PV and biomass;
- · fluctuations in economic and market conditions that affect the viability of conventional and non-solar renewable energy sources, such as increases or decreases in the prices of oil and other fossil fuels;
- fluctuations in capital expenditures by end-users of PV modules, which tend to decrease when the economy slows and interest rates increase; and
- deregulation of the electric power industry and the broader energy industry.

A change in environmental regulations could cause serious disruption to operations and negatively impact our results.

Our operations involve the use, handling, generation, processing, storage, transportation, recycling and disposal of hazardous materials and are subject to extensive environmental laws and regulations at the national, provincial, local and international level. These environmental laws and regulations include those governing the discharge of pollutants into the air and water, the use, management and disposal of hazardous materials and wastes, the clean-up of

contaminated sites and occupational health and safety. We have incurred and will continue to incur capital expenditures in order to seek to comply with these laws and regulations. In addition, violations of, or liabilities under, environmental laws or permits may result in restrictions being imposed on our operating activities or in our being subject to substantial fines, penalties, criminal proceedings, third party property damage or personal injury claims, clean-up costs or other costs. While we believe that we are currently in compliance with applicable environmental requirements, future developments such as more aggressive enforcement policies, the implementation of new, more stringent laws and regulations, or the discovery of currently unknown environmental conditions may require expenditures, or changes in our operations, that could have a material adverse effect on our business, results of operations and financial condition.

Although China has enacted environmental protection legislation to regulate the mining industry, due to the very short history of this legislation, national and local environmental protection standards are still in the process of being formulated and implemented.

Chinese legislation provides for penalties and other liabilities for the violation of environmental protection standards and establishes, in certain circumstances, obligations to rehabilitate current and former facilities and locations where operations are being or have been conducted.

We believe that there are no outstanding notices, orders or directives from central or local environmental protection agencies or local government authorities alleging any breach of national or local environmental quality standards by us or any other party in respect of our property. Although we intend to fully comply with all environmental regulations, there is a risk that permission to conduct exploration, development and manufacture activities could be withdrawn temporarily or permanently where there is evidence of serious breaches of such standards. In addition, given the relative lack of precedents in enforcing the new environmental protection laws, there are no guarantees that the laws or the interpretation of the laws or regulations, will not materially change, which could require us to substantially change, or entirely cease, our operations in China.

Because of growing demand for high-purity metals, we may be subject to more competition in the near future.

The forecasted growth in demand for high-purity metals, especially those used by the solar power industry, is expected to attract more metal refiners into that industry and increase competition. Competition could arise from new low-cost metal refiners or from certain of our customers who could decide to backwards integrate.

We may incur losses resulting from business interruptions.

We may incur losses resulting from business interruptions. In many instances, especially those related to our long-term contracts, we have contractual obligations to deliver product in a timely manner. Any disruption in our activities which leads to a business interruption could harm our customers' confidence level and lead to the cancellation of our contracts and legal recourse against us. Although we believe that we have taken reasonable precautions to avoid business interruptions, we could still experience interruptions which would adversely impact our financial results.

Protection of our proprietary processes, methods and other technologies is critical to our business and therefore any failure to protect the use of our existing intellectual property rights could result in the loss of valuable technologies and processes.

Protection of our proprietary processes, methods and other technologies is critical to our business. We rely almost exclusively on a combination of Chinese patents, trade secrets and employee confidentiality agreements to safeguard our intellectual property. Failure to protect and monitor the use of our existing intellectual property rights could result in the loss of valuable technologies and processes and materially adversely affect our business.

If our insurance coverage is unavailable or insufficient to cover future claims against us, our financial resources and results of operations could be adversely affected.

We have limited insurance coverage for a number of risks, including environmental situations and personal injury. Although we believe that the events and amounts of liability covered by our insurance policies are reasonable taking into account the risks relevant to our business as carried out to date, there can be no assurance that such coverage will be available or sufficient to cover all claims to which we may become subject. If insurance coverage is unavailable or insufficient to cover any such claims, our financial resources and results of operations could be adversely affected.

We have limited business insurance coverage, and accordingly any business disruption, litigation or natural disaster might result in substantial costs and diversion of resources.

The insurance industry in China is still at an early stage of development. Insurance companies in China offer limited business insurance products, and do not generally, to our knowledge, presently offer business liability insurance. As a result, we do not have any business liability insurance coverage for our operations. Moreover, while business disruption insurance is available, we have determined that the risks of disruption and cost of the insurance are such that we have not obtained such insurance at this time. Any business disruption, litigation or natural disaster might result in substantial costs and diversion of resources.

#### Risks Related to Doing Business in the PRC

Government regulations may hinder our ability to function efficiently.

The national, provincial and local governments in the PRC are highly bureaucratized. The day-to-day operations of our business require frequent interaction with representatives of the Chinese government institutions. The effort to obtain the registrations, licenses and permits necessary to carry out our business activities can be daunting. Significant delays can result from the need to obtain governmental approval of our activities. These delays can have an adverse effect on the profitability of our operations.

Because the ownership and exploitation of mineral resources is subject to extensive government regulation we cannot assure that required approvals, licenses and permits will be granted, or if granted, will be granted in a timely manner.

Ownership of all land in China remains with the State and the State, at the national, regional and local levels, is extensively involved in the regulation of exploration and mining activities. Transfers of exploration rights are also subject to governmental approval. Failure or delays in obtaining necessary approvals could have a materially adverse affect on our financial condition and results of operations. Nearly all mining projects in the PRC require government approval. There can be no certainty that any such approvals will be granted (directly or indirectly) to the Company or any direct or indirect subsidiary of the Company, or at all. There is no assurance that our mineral exploration and development activities will result in any discoveries of commercial bodies of tellurium. The long—term profitability of our operations will in part be directly related to the costs and success of our exploration programs, which may be affected by a number of factors. Failure to obtain such licenses and permits as are required would cause us to materially change or cease operations in China.

The PRC laws and regulations governing our current business operations are sometimes vague and uncertain. Any changes in such PRC laws and regulations or their interpretation and application may have a material and adverse effect on our business.

There are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including but not limited to the laws and regulations governing our business, or the enforcement and performance of our arrangements with customers in the event of the imposition of statutory liens, death, bankruptcy and criminal proceedings. We and any future subsidiaries are considered foreign persons or foreign-invested enterprises under PRC laws, and as a result, we are required to comply with PRC laws and regulations applicable to such persons or enterprises. These laws and regulations are sometimes vague and may be subject to future changes, and their official interpretation and enforcement may involve substantial uncertainty. The effectiveness of newly enacted laws, regulations or amendments may be delayed, resulting in detrimental reliance by foreign investors. New laws and regulations that affect existing and proposed future businesses may also be applied retroactively. We cannot predict what effect the interpretation or application of existing or new PRC laws or regulations may have on our businesses.

A slowdown or other adverse developments in the PRC economy may materially and adversely affect our customers, demand for our services and our business.

We are a holding company and all of our operations are conducted in the PRC. Although the PRC economy has grown significantly in recent years, we cannot assure you that such growth will continue. The solar energy industry in the PRC is encouraged by Chinese government, relatively new and growing, but we do not know how sensitive we are to a slowdown in economic growth or other adverse changes in the PRC economy which may affect demand for our products. A slowdown in overall economic growth, an economic downturn or recession or other adverse economic developments in the PRC may materially reduce the demand for our products and materially and adversely affect our business.

Inflation in the PRC could negatively affect our profitability and growth.

While the PRC economy has experienced rapid growth, such growth has been uneven among various sectors of the economy and in different geographical areas of the country. Rapid economic growth can lead to growth in the money supply and rising inflation. If prices for our products rise at a rate that is insufficient to compensate for the rise in the costs of supplies, it may have an adverse effect on profitability. In order to control inflation in the past, the PRC government has imposed controls on bank credits, limits on loans for fixed assets and restrictions on state bank lending. Such an austerity policy can lead to a slowing of economic growth. Although the People's Bank of China, the PRC's central bank, currently keeps the interest rate low, it has indicated an interest rate increase is possible and necessary for the inflationary concerns in the Chinese economy. Repeated rises in interest rates by the central bank would likely slow economic activity in China, which could, in turn, materially increase our costs and also reduce demand for our products.

Sichuan Apollo is subject to restrictions on paying dividends and making other payments to us.

We are a holding company incorporated in the State of Nevada and do not have any assets or conduct any business operations other than our investments in our subsidiaries. As a result of our holding company structure, we rely primarily on dividend payments from our indirect wholly owned subsidiaries in China. However, PRC regulations currently permit payment of dividends only out of accumulated profits, as determined in accordance with PRC accounting standards and regulations. Our subsidiaries in China are also required to set aside a portion of their after-tax profits according to PRC accounting standards and regulations to fund certain reserve funds. The PRC government also imposes controls on the conversion of RMB into foreign currencies and the remittance of currencies out of China. We may experience difficulties in completing the administrative procedures necessary to obtain and remit foreign currency. Furthermore, if our subsidiary or affiliated entity in China incurs debt on their own in the future, the instruments governing the debt may restrict their ability to pay dividends or make other payments. If we, or any of our direct or indirect subsidiaries, is unable to receive all of the revenues from our operations through these contractual or dividend arrangements, we may be unable to pay dividends on our common stock.

Governmental control of currency conversion may affect the value of an investment in the Company.

The PRC government imposes controls on the convertibility of RMB into foreign currencies and, in certain cases, the remittance of currency out of the PRC. We receive a significant portion of our revenues in RMB, which is currently not a freely convertible currency. Shortages in the availability of foreign currency may restrict our ability to remit sufficient foreign currency to pay dividends, or otherwise satisfy foreign currency dominated obligations. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and expenditures from the transaction, can be made in foreign currencies without prior approval from the PRC State Administration of Foreign Exchange by complying with certain procedural requirements. However, approval from appropriate governmental authorities is required where RMB is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of bank loans denominated in foreign currencies.

The PRC government may also at its discretion restrict access in the future to foreign currencies for current account transactions. If the foreign exchange control system prevents us from obtaining sufficient foreign currency to satisfy our currency demands, we may not be able to pay certain of our expenses as they come due.

The fluctuation of the Renminbi may materially and adversely affect an investment in the Company.

The value of the RMB against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in the PRC's political and economic conditions. As a significant portion of our revenues are earned in the PRC, any significant revaluation of the RMB may materially and adversely affect our cash flows, revenues and

financial condition. For example, to the extent that we need to convert U.S. dollars we receive from an offering of our securities or other financing into RMB for use in our operations, appreciation of the RMB against the U.S. dollar could have a material adverse effect on our business, financial condition and results of operations. Conversely, if we decide to convert our RMB into U.S. dollars for the purpose of making payments for dividends on our common shares or for other business purposes and the U.S. dollar appreciates against the RMB, the U.S. dollar equivalent of the RMB we convert would be reduced. In addition, the depreciation of significant U.S. dollar denominated assets could result in a charge to our income statement and a reduction in the value of these assets.

You may experience difficulties in effecting service of legal process, enforcing foreign judgments or bringing original actions in China based upon U.S. laws, including the federal securities laws, or other foreign laws against us or our management.

All of our current operations are conducted in China. Moreover, most of our directors and officers are nationals and residents of China. All or substantially all of the assets of these persons are located outside the United States and in the PRC. As a result, it may not be possible to effect service of process within the United States or elsewhere outside China upon these persons. In addition, uncertainty exists as to whether the courts of China would recognize or enforce judgments of U.S. courts obtained against us or such officers and/or directors predicated upon the civil liability provisions of the securities laws of the United States or any state thereof, or be competent to hear original actions brought in China against us or such persons predicated upon the securities laws of the United States or any state thereof.

#### Risks Related to Our Common Stock

We are not likely to pay cash dividends in the foreseeable future.

We currently intend to retain any future earnings for use in the operation and expansion of our business. We do not expect to pay any cash dividends in the foreseeable future but will review this policy as circumstances dictate. Should we decide in the future to do so, as a holding company, our ability to pay dividends and meet other obligations depends upon the receipt of dividends or other payments from our subsidiaries. In addition, our operating subsidiary, from time to time, may be subject to restrictions on its ability to make distributions to us, including as a result of restrictions on the conversion of local currency into U.S. dollars or other hard currency and other regulatory restrictions.

There is currently a limited trading market for our Common Stock.

Our Common Stock is quoted on the OTCQB. However, our bid and asked quotations have not regularly appeared on the OTCQB for any consistent period of time. There is no established trading market for our Common Stock and our Common Stock may never be included for trading on any stock exchange or through any other quotation system (including, without limitation, the NASDAQ Stock Market). Investors may not be able to sell their shares due to the absence of a trading market.

Our common stock is currently classified as a "penny stock" under SEC rules, which may make it difficult for our shareholders to resell their shares of our common stock.

The Rules of the Securities and Exchange Commission classify as a "penny stock" any security that does not trade on a national securities exchange (e.g. NYSE, NYSE Amex, NASDAQ, etc., but not including the OTC Bulletin Board or the OTCQB) if the market price of the security is less than \$5.00 per share. SEC Rule 15g-9 under the Securities Exchange Act of 1934 imposes additional sales practice requirements on broker-dealers that recommend the purchase or sale of penny stocks to persons other than those who qualify as an "established customer" or an "accredited investor." This includes the requirement that a broker-dealer must make a determination on the appropriateness of investments in penny stocks for the customer and must make special disclosures to the customer concerning the risks of penny stocks. For this reason and because penny stocks are generally considered to be more risky than non-penny stocks, many brokers will not recommend the purchase of penny stock by their customers.

Our common stock is not listed on a national securities exchange, and is currently priced below \$5.00, as a result of which our common stock is currently classified as a penny stock. The holders of our common stock may experience greater difficulties in attempting to sell the stock, due to the limited market for penny stock. In addition, because the

penny stock classification reduces the liquidity of a security, the classification may have a negative effect on the market price of our common stock, such that our shareholders may not be able to obtain a satisfactory sale price.

#### ITEM 2. PROPERTIES

#### General

Our corporate headquarters are located in Shuangliu Chengdu, Sichuan, China, where we own the land use rights and occupy 89,412 square meters of space. Our Shuangliu facility currently consists of an office building, testing center, laboratory, production department, dormitory, and dining hall.

Dashuigou and Majiagou Projects

#### **Property Mineral Rights**

Under the "Mineral Resource Law of the China," all mineral resources in the PRC are owned by the state. A mining or exploration enterprise may obtain a permit for conducting mining or exploration activities in a specific area during a specified period of validity. These permits are generally extendable at the expiration of their period of validity. To renew an exploration permit, all exploration permit fees must be paid and the minimum exploration expenditure should have been made for the area designated under the exploration permit. To renew a mining permit, all mining permit fees and resource compensation fees must be paid to the state for the area designated under the mining permit. A mining permit has both horizontal limits and elevation limits, but an exploration permit has only horizontal limits.

Effective August 22, 2008, we acquired 100% of the equity of Sichuan Xinju Shimian Dadu River Mining & Metallurgy Co., Ltd. from Renyi Hou, our former Chairman and Chief Executive Officer, Wei Li and Yong Ling, a former CFO. With this acquisition, we obtained an exclusive permit to explore and mine the Dashuigou tellurium mine. On April 10, 2009, we entered into the VIE Agreements with Sichuan Xinju Mineral Resources Development Corporation and certain of its shareholders holding a majority of its voting equity stock. The VIE Agreements provided us control of an entity with a permit to explore and mine the Dashuigou and Majiagou mines. Details of the effective dates and geographic areas of the permits for mining and exploration rights relating to Dashuigou and Majiagou properties are listed in the table below:

## Mineral Rights Controlled by Sichuan Apollo

					Elevation	
Project	Permit Name	Permit Type	Number	Area (km2)	Range (m)	Termination
Daishuigou	Daishuigou Te-Bi-S-Fe Mine	Mining	5100000730004	0.8	1,440 - 1,705	Jan. 2014
	Gaishuigou Pb-Zn-Mable Exploration	Exploration	T51120080403005938	6.29	n/a	June 2013
Majiagou	Majiagou Te-Bi Mine	Mining	5100000510226	0.0568	1,540 - 1,640	May 2013

Each of the Dashuigou and Majiagou mines are open-pit mines, located in Shimian County of Sichuan Province, PRC.

In late 2008, the Company engaged Behre Dolbear Asia, Inc., or BDASIA, a wholly-owned subsidiary of Behre Dolbear & Company, Inc., to conduct an independent technical review of the Dashuigou and Majiagou mines. Senior-level professionals from BDASIA physically examined the Dashuigou and Majiagou mines, and a copy of the BDASIA report was included as Exhibit 99.2 to the Company's Current Report of Form 8-K filed with the SEC on May 12, 2009. Because no reserves under SEC Industry Guide 7 were delineated at either of the Dashuigou or

Majiagou mines at the time the BDASIA report was prepared, BDASIA employed the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, or the JORC Code, to review the mineral resource estimates.

The Dashuigou and Majiagou Projects are currently at the exploration stage with only limited production. Significant amounts of exploration work, mostly through underground drifting and surface trenching, have been conducted since the discovery of the tellurium deposits in 1991 and mineral resources have been estimated a number of times for the properties. Metallurgical testing and limited actual production on the tellurium mineralized material produced from the Dashuigou and Majiagou Projects have been conducted with positive results. The projects have had only limited mine production to date. With the recent sharp increase in tellurium price, Sichuan Apollo is currently in the process of preparing to fully develop the properties in order to start formal mining operation. Sichuan Apollo also purchases tellurium from other sources in China for its high-purity tellurium production in addition to the tellurium mineralized material produced from the Dashuigou and Majiagou Projects.

#### Location, Infrastructure, and Access

The Dashuigou and Majiagou projects are located approximately 23 linear kilometers southwest of the town of Shimian, the county seat of Shimian County in southwestern Sichuan Province. Access from Shimian to the project site is by sinuous two-lane paved highways and unpaved gravel roads along the southwestern bank of the Dadu River, then along the southeastern bank of the Songlin River, a tributary of the Dadu River. The road distance is approximately 38 kilometers and it takes about one hour to drive from Shimian to the project site. The last approximately five kilometers of the access road is currently unpaved, but the county has plans to upgrade the section of the gravel road to paved highways in the near future.

The Dashuigou and Majiagou projects consist of numerous small tellurium-bearing massive-sulfide and/or dolomite-ankerite veins in a very-steep mountainous area. Formal mining operation envisioned by the Company are expected to produce between 10 and 50 tonnes per day, or tpd, for both properties. Currently, there is a small mining camp operated by Sichuan Apollo to support exploration and mine development efforts as well as a very small scale mining activity. The Dashuigou and Majiagou Projects are located approximately 1 km north of the camp. The Dashuigou project can be accessed via a very steep walking trail; the Majiagou project is located due west of the Dashuigou project and can also be accessed by steep walking trails. An underground level at the elevation of 1,464 meters has been developed for the Dashuigou project but additional development work is needed before normal mining activity can be initialized.

Electricity is not currently connected to the Dashuigou and Majiagou projects but is instead currently generated by diesel motors; however, Shimian County has abundant hydroelectric power and there is a 35kV electricity transmission line crossing the project area and power supply for mining operation can be easily established at a reasonable cost. Exploration and mine development work as well as mining operations are currently carried out by mining contractors using labor-intensive manual methods, and mineralized material produced from the projects is hauled to the company's flotation mill for processing, which is located approximately 30 kilometers (80 kilometers by road) north of the projects, by contractor using 20- to 30-tonne haul trucks. The hauling cost is currently a significant portion of the operation's cost because of the long hauling distance. The current flotation mill, which has a designed production capacity of 50 tonnes per day for processing copper mineralized material, is not fully functional because it was not completely refurbished for processing the Dashuigou and Majiagou tellurium mineralized material after its purchase in 2000. While the current flotation mill has a production capacity of 25 to 30 tonnes per day, the Company believes that the mill satisfies its current needs for processing and produces acceptable tellurium concentrates at acceptable concentrating recoveries.

The current mill site is located within the planned flooding area for a major hydroelectric power station that is currently under construction. Sichuan Apollo will be compensated to relocate the mill to a new location. Sichuan Apollo is currently considering several locations for the site of the new mill. Although the location is not finalized yet, the Company believes it will be located considerably closer to the Dashuigou and Majiagou projects than the current mill, resulting in significant savings in hauling cost.

#### Regional Geological Setting

The Dashuigou and Majiagou projects are located in the transitional zone between the Yangtze craton to the east and the Songpan-Ganzi orogenic belt to the west. Strata outcropping in the region include Upper Sinian System (the upper most stratigraphic unit of Proterozoic strata in China) carbonate rocks, Ordovician to Silurian System metamorphosed clastic rocks and carbonate rocks with mafic volcanic rock interbeds, Devonian System marbles and slates, Permian System carbonate rocks and metabasalts, and Lower to Middle Tertiary System lightly-metamorphosed clastic rocks with carbonate rock interbeds. These strata were separated into a number of structural blocks by lateral shear-structural zones in the north-northwestern, north-south, and northeastern directions, and were over-thrust easterly on to the pre-Sinian metamorphosed basement.

The primary structural feature in the project area is the north-northeastern-trending dome-shaped Dashuigou anticline. The core of the anticline consists of Ordovician Dahebian Formation marbles, which are overlain by Silurian Tonghua Group metamorphosed mafic volcanic rocks, marbles, and clastic rocks. Tellurium mineralization in the project area is generally hosted by the metamorphosed mafic volcanic rocks at the lower portion of the Tonghua Group. The anticline axis has generally been eroded into a deep canyon and the Songlin River runs roughly parallel to the axis of the Dashuigou anticline.

#### Deposit Geology

The Ordovician Dahebian formation marbles outcropping as the core of the Dashuigou anticline represents the upper portion of the formation with a minimum thickness of 457 meters. The marble is generally white to light-gray in color with some dark gray bands; it is thickly to massively bedded and consists of mostly coarse-grained calcite. The Silurian Tonghua Group above the Ordovician Dahebian Formation marbles was subdivided into seven formations, but only the lower three formations, No.1 to No.3, are present in the project area. The lowest No.1 formation is a dark-gray to dark-greenish-gray actinolite, amphibole, and/or muscovite schist, which is interpreted to have been metamorphosed from a submarine mafic volcanic unit. This schist unit is 105 meters to 345 meters thick in the project area. Above the schist is the No.2 gray to white marble formation with a thickness of approximately 174 meters. This marble formation is generally massive but it contains some schist bands in the lower portion. The No.3 formation of the Tonghua Group is a greenish-gray to light-gray schist and phyllite unit, interpreted to have been formed from clastic and volcanic rocks. The No.3 schist formation is more than 765 meters thick and it mostly occurs in the northern portion of the project area.

The contacts between the three formations of the Tonghua Group are generally conformable but the contact between the Ordovician and Silurian strata was interpreted as a parallel unconformity because of the sharp change of lithology. The No.1 formation schist of the Silurian Tonghua Group is the primary host for tellurium mineralization in the project area, and the upper portion of the Ordovician Dahebian marbles may also host small amounts of mineralization locally.

The Dashuigou and Majiagou deposits occur at the northern portion of the Dashuigou anticline, where stratagenerally strike northwesterly and dip to the northeast at 10° to 30°. Some north-south-trending secondary folds and north-south, east-west, northeastern, and northwestern-trending minor faults have been developed in the project area. Many of these minor faults in the No.1 schist formation of the Silurian Tonghua Group were filled with massive sulfide and /or dolomite veins and some of the veins have significant tellurium and bismuth grades.

#### Mineralization

Tellurium mineralization at the Dashuigou and Majiagou projects occurs generally as steep-dipping, small massive sulfide and/or dolomite veins within the No.1 formation schist of the Silurian Tonghua Group.

## The Dashuigou Deposit

A total of 25 mineralized veins have been found at the Dashuigou deposit. These veins are generally striking north-south, north-northeast, to northeast, sub-parallel to the axis of the Dashuigou anticline, and dip steeply to the west at angles of mostly from 60° to 75°. They occur in an area 400 meters long in the east-west direction and over 140 meters wide in the north-south direction. The mineralized veins are generally small in size, ranging from less than 20 meters to over 100 meters in length and around 1meter or less in width. They generally exhibit swelling and pinching, splitting and merging in both strike and dip directions. Thicker and higher-grade mineralized pods are commonly developed at the intersections of veins of different orientations.

Based on the mineral assemblage, the vein material is divided into several types, including massive sulfides, massive tellurides, carbonates (mostly dolomite-ankerite), and gold-bearing quartz. The massive sulfide is the most common mineral assemblage, which was the target for historical artisanal mining activities in the area. Tetradymite (Bi2TeS2) is the primary tellurium-bearing mineral in the deposits and contains over 80% of the tellurium. The mineral is steel-gray to pale-yellow in color, soft (with a hardness of 1.5), and heavy (with a specific gravity of 7.1 to 7.4). It occurs as coarse-gained and well-foliated masses in the massive telluride assemblage, or as small veinlets or dissemination in massive sulfide and carbonate assemblages. Electronic microprobe analysis data shows that the average chemical composition of tetradymite from the Dashuigou deposit consists of 33.60% Te, 60.88% Bi, 4.65% S, 0.35% Se, 0.13% Ag, 0.05% Cu and 0.04% Fe, which is quite close to its theoretic composition of 36.19% Te, 59.17% Bi, and 4.55% S. Other tellurium-bearing minerals include tsumoite (BiTe), joseite (BiTeS) and tellurobismuthite (BiTe) and native tellurium.

Pyrrhotite is the primary (over 90%) sulfide mineral, with small amounts of pyrite, chalcopyrite, bismuthinite, and sphalerite. Native gold, along with quartz and small amounts of sulfide minerals, occurs in minor late-stage gold-bearing quartz veins. Gauge minerals include dolomite, ankerite, calcite, quartz, muscovite, albite, chlorite, and tourmaline.

Tellurium grade distribution is very irregular, ranging from less than 0.01% to more than 8% in the deposits. Available underground sampling data indicates that of the 25 veins identified, only 3 have significant tellurium grades.

## The Majiagou Deposit

The Majiagou deposit is located due west of the Dashuigou deposit. Tellurium mineralization in the deposit is very similar to that in the Dashuigou deposit and is also hosted mostly by the No.1 formation schist of the Silurian Tonghua Group. The deposit was explored by surface trenching and limited underground workings, and a total of 26 mineralized veins have been found within an area of 600 meters long in the east-west direction and 300 meters wide in the north-south direction, but only 20 of the veins are located within the current Majiagou mining license. Many of the veins strike northeast and dip to the northwest at a steep angle; some of the veins strike northwest, north-south, or east-west.

Similar to the Dashuigou deposit, the mineralized veins at Majiagou are also small in size, ranging from a few meters to over 60 meters in length and less than 1 meter in width. They generally exhibit swelling and pinching, splitting and merging along both strike and dip directions. Mineral assemblages and alterations for the Majiagou deposit are generally also the same as that in the Dashuigou deposit.

Tellurium grade distribution is very irregular, it ranges from less than 0.01% to more than 5% in the deposit. Available surface trench and underground sampling data indicates that of the 26 veins identified, only four have significant tellurium grade.

In aggregate, both mines have an average reported tellurium grade of 1.17%. The majority of the licensed area remains unexplored and the Company believes that the unexplored areas have excellent potential for the discovery of additional tellurium-bearing veins.

#### Market Prices for Tellurium

The average price for industry grade tellurium with a purity of at least 99.95% increased dramatically from US\$13 per kilogram in 2004 to US\$280 per kilogram in 2012. Although there is insufficient public information, prices for high-purity tellurium of 99.999% to 99.9999% (or 5N to 7N) Te are considerably higher than the price of industrial

grade tellurium.

#### ITEM 3. LEGAL PROCEEDINGS

We are not involved in any material legal proceedings.

#### ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

#### PART II

# ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock is listed for quotation on the OTCBB under the symbol "ASOE". We have 51,795,961 issued and outstanding shares of common stock and 556 common stock holders of record.

	Common Stock Price			
	High		Low	
Fiscal Year Ending December 31, 2012				
Fourth Quarter	\$ 0.30	\$	0.22	
Third Quarter	\$ 0.31	\$	0.17	
Second Quarter	\$ 0.51	\$	0.20	
First Quarter	\$ 0.40	\$	0.15	
Fiscal Year Ending December 31, 2011				
Fourth Quarter	\$ 0.75	\$	0.15	
Third Quarter	\$ 1.90	\$	0.50	
Second Quarter	\$ 2.70	\$	1.50	
First Quarter	\$ 3.92	\$	2.30	

#### Dividends

The Company has not paid or does not expect to declare or pay any cash dividends on its common stock in the foreseeable future, and it currently intends to retain future earnings, if any, to finance the expansion of its business. The decision whether to pay cash dividends on the Company's common stock will be made by the Company's board of directors, in their discretion, and will depend on its financial condition, operating results, capital requirements and other factors that the board of directors considers significant.

#### Recent Sales of Unregistered Securities

The Company did not complete any unregistered sale of equity securities during the fourth quarter of 2012.

#### Repurchase of Equity Securities

The Company did not repurchase any of its equity securities that were registered under Section 12 of the Securities Act during the quarter ended December 31, 2012.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Empire Stock Transfer, Inc.

**Equity Compensation Plan Information** 

Our equity compensation plan information is provided as set forth in Part III, Item 11 herein.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

Not Applicable

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion contains forward-looking statements that involve risks and uncertainties. Forward-looking statements include, but are not limited to, statements regarding future events, our plans and expectations and financial projections. Our actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences include, but are not limited to, those discussed elsewhere in this Form 10-K. See Item 1A: "Risk Factors."

Critical Accounting Policies, Estimates and Assumptions

Management's discussion and analysis of results of operations and financial condition are based upon our consolidated financial statements. These statements have been prepared in accordance with accounting principles generally accepted in the United States of America. These principles require management to make certain estimates and assumptions that affect amounts reported and disclosed in the financial statements and related notes. On an ongoing basis, we evaluate our estimates, including those related to, bad debts, inventories, fixed assets, income taxes and other contingencies. We based our estimates on historical experience and various other assumptions that we believe are reasonable under the set of current conditions. Actual results may differ from these estimates under a different set of assumptions or set of conditions.

In our preparation of the consolidated financial statements for 2012 there were five estimates made which were (a) subject to a high degree of uncertainty and (b) material to our results. They were:

- Our determination of the appropriate allowance for assets held for sale, as disclosed in Note 6 to our Financial Statements. We based the determination on current market conditions.
- Our determination to record our inventories at cost, as disclosed in Note 4 to our Financial Statements. We based the determination on our expectation that we will be able to liquidate our inventories at prices (net of selling expenses) in excess of cost.
- Our determinations of the useful life of our property and equipment, as disclosed in Note 5 to our Financial Statements. We based the determination on our assessment of the useful life of comparable property and equipment.
- Our determination of the fair value of our investment in the joint venture, as discussed in Note 7 to our Financial Statements. The determination was based on the appraised

value of the assets in the joint venture and on our assessment of the anticipated discounted cash flows from the joint venture.

Our determination to record a 100% valuation allowance for our deferred tax assets, as disclosed in Note 15 to our Financial Statements. The determination was based on our lack of assurance as to whether we will realize taxable income in the future against which the deferred tax assets can be applied.

## **Results of Operations**

#### Sales

Net sales for the year ended December 31, 2012 were \$4,484,708, 56.8% lower than the net sales of \$10,369,260 for the year ended December 31, 2011. The decrease in net sales was primarily attributable to the general downturn of the international solar industry. Whereas in 2011 international sales made up 28% of our sales, and 68% in 2010, in 2012 only 5% of our sales were made to customers outside of China.

Tellurium represented the greater part of our sales in 2012, as we generated \$3,225,806 in revenue (72% of total revenue) from the sale of 17.7 tons of tellurium. The remainder of our sales revenue arose from the sale of 35.8 tons of miscellaneous high purity metals and compounds.

#### Gross loss

Our gross loss for the year ended December 31, 2012 was \$365,405, as we realized a negative gross margin of (8.1%). in 2011 our sales yielded \$1,484,893 in gross profit with a gross margin of 14.3%.

The primary reason for the gross loss realized in 2012 was the delay in production from our tellurium mines, caused by new government regulations. Without an internal source of tellurium, we were forced to purchase tellurium on the world market, where prices have risen significantly in the past several years. As a significant amount of our revenue was generated from the sale of compounds incorporating high purity tellurium, our margin was impacted adversely. We expect this situation to improve as we have satisfied the new government regulations and expect internal tellurium production to be initiated in the next year.

#### Selling expenses

For the year ended December 31, 2012, selling expenses were \$271,575, compared to \$369,092 for the year ended December 31, 2011 representing a 26.4% decrease. The percentage of our selling expenses to net sales actually increased to 6.1% from 3.6% from the year ended December 31, 2011, reflecting our increased efforts to promote our products to the market.

#### General and administrative expenses

We incurred general and administrative expenses of \$3,292,124 for the year ended December 31, 2012, compared to those of \$4,213,495 for the year ended December 31, 2011, representing a decrease of 22%. The principal reason for the decrease was the significant reduction in our staff from year to year. In particular, certain members of senior management left the company, resulting in expiration of their stock options. Our stock-based compensation expense, therefore, fell from \$899,788 in 2011 to \$423,598 in 2012.

#### Research and development expenses

For the year ended December 31, 2012, we incurred research and development expenses of \$1,265,423, representing an increase of 35% from the research and development expenses of \$934,583 that we incurred for the year ended December 31, 2011. Most of the increase was related to efforts to develop new metal products. Research and development expense in 2012 included \$250,000 payable to NJIT pursuant to our now-terminated Joint Research Agreement. In 2011 we accrued \$500,000 for that purpose. We are committed to the improvement of product quality and the development of new products.

Gain from investment in Joint Venture; Income(loss) on equity of Joint Venture

In 2009, we entered into a joint venture agreement, pursuant to which we acquired a 35% equity interest in the joint venture, CEO Apollo Solar, in exchange for our contribution of certain assets with a fair value of \$7,735,046 and debt of \$5,752,534. Accounting standards require that we report a gain on the difference between the cost we incurred in acquiring the contributed assets and our proportionate share of the net equity of the joint venture. For this reason, during 2012 we recorded a gain of \$2,041,525. As all contributions to the equity of COE Apollo Solar were completed in 2012, no further gain or loss will be recorded in connection with the formation of the joint venture.

Because we hold a minority interest in COE Apollo Solar, we record our share of the joint venture's profits and losses on the equity basis. For 2012, we recorded a gain of \$7,496 on our investment in COE Apollo Solar and for 2011 a loss of \$80,058, representing 35% of the net gain and net loss incurred by that entity in those years.

#### Interest expense

For the years ended December 31, 2012 and 2011, we incurred interest expenses of \$1,054,240 and \$272,619 respectively, representing an increase of 287%. The increase occurred primarily because we substantially increased our debt in order to finance construction in process.

In 2011 we recorded \$837,359 in interest income from a related party. This accounting entry occurred when our largest shareholder, Renyi Hou, satisfied a loan of \$4,379,411 that he had borrowed from the Company. The loan, when originally incurred, had been non-interest-bearing. When Mr. Hou and the Company's board of directors agreed that the loan would be satisfied by Mr. Hou's surrender to the Company of a portion of his common shares, the determination was made that the failure to charge interest on the loan was a result of the loan being non-arms-length. Mr. Hou was required, therefore, to surrender sufficient shares to repay the principal plus interest accrued ab initio.

#### Provision for income tax

The Company's Chinese subsidiaries are governed by Income Tax Law of the PRC concerning private-run enterprises, which are generally subject to taxes at a statutory rate of 25% on income reported in the statutory financial statements prepared in accordance with PRC GAAP after appropriate tax adjustments. Operating loss can be carried forward for five years in China and, subject to certain restrictions, 20 years in the U.S.

The Company's subsidiary, Sichuan Xinlong, is classified as high-tech company and, for that reason, was allowed to pay income tax at only 15% in China for the years ended December 31, 2011 and 2010. Commencing in 2012, however, Sichuan Xinlong is paying income tax at the national rate of 25%.

Provision for income tax for the year ended December 31, 2012 was \$102,918, compared to \$0 for the year ended December 31, 2011.

#### Net loss

For the year ended December 31, 2012 we had a net loss of \$5,227,750, compared to a net loss of \$3,768,738 for the year ended December 31, 2011. Our expectation is that we will continue to incur losses until we are able to source most of our Tellurium from our own mines.

#### Liquidity and Capital Resources

We have historically funded our operation primarily through paid-in capital, sales of goods, loan from owners and short term loans from financial institutions in China. Based on our current cash level and management's forecast of operating cash flows, management has determined that the Company will require additional funds, either debt or equity, to finance our current operations.

The following table summarizes our liquidity and capital resources for the periods presented.

	Decer	nber 31, 2012	2011
Cash	\$	940,225	\$ 363,771
Working capital (deficit)	\$	(7,497,221)	\$ (2,402,548)
Shareholder's equity	\$	14,736,634	\$ 19,530,517

The Company had a working capital deficit of \$7,497,221 at December 31, 2012. This represented an atrophy of \$5,094,673 from the \$2,402,548 working capital deficit that it showed at December 31, 2011. The primary reason for the atrophy of working capital was the \$5,227,750 loss that we incurred in 2012.

The following table describes our contractual commitments and obligations as of December 31, 2012:

	Payments due by Period (in \$)								
Contractual Obligations	Total		Less Than 1 Year	1 - Ye	- 3	_	– 5 ears	Mo Th 5 Ye	
Loans from									
shareholders									
and related									
party \$	373,322	\$	373,322	\$	-	\$	-	\$	-
Short-term \$	7,797,845	\$	7,795,845	\$	-	\$	-	\$	-
loans									
Convertible \$	100,970	\$	-	\$	-	\$	100,970	\$	-
loan									
\$	8,272,137	\$	8,171,167	\$		\$	100,970	\$	-

Given that the Company's debt obligations in 2013 equal 169% of its current assets at December 31, 2012, management has determined that additional funds will have to be secured in order to finance our operations for the coming year.

# Cash flows

The following table shows the movements of our cash for the periods presented.

	Years Ended December 31,				
		2012		2011	
Not each used in energing estivities	Ф	(3,228,441)	\$	(112,367)	
Net cash used in operating activities	\$		Ф	, , ,	
Net cash provided by (used in) investing activities		(197,019)		559,218	
Net cash provided by (used in) financing activities		4,002,950		(2,781,708)	
Effect of exchange rate changes on cash		(1,036)		22,452	
Net increase (decrease) in cash	\$	576,454	\$	(2,312,405)	
Cash at beginning of year		363,771		2,676,176	
Cash at end of year	\$	940,225	\$	363,771	

Net cash used in operating activities.

Net cash used in operating activities for the year ended December 31, 2012 was \$3,228,441, compared to \$112,367 used in the year ended December 31, 2011. For the year ended December 31, 2012, the net cash used in operation activities was primarily attributable to net loss of \$5,227,750. That net loss would have been worse but for the non-cash gain of \$2,041,525 on investment in the joint venture that we recorded. On the other hand, the net loss included a non-cash expense of \$925,093 arising from the impairment of assets held for sale. In addition, the net loss included \$934,155 of depreciation and amortization expense, a non-cash expense. Finally we were able to reduce our cash usage by reducing our inventories by \$663,606.

For the year end December 31, 2011, the primary reason that cash usage was significantly less than the net loss was the decision to reduce our inventory balance in that year by \$2,990,194. In addition, we increased our accrued expenses by \$1,506,748, which offset the \$1,448,943 in cash that we used to satisfy accounts payable for construction.

Net cash provided by (used in) investing activities.

Our investing activities for the year ended December 31, 2012 used \$197,019 in cash. This is primarily attributable to the purchase of property and equipment.

Our investing activities for the year ended December 31, 2011 provided \$559,218 in cash. We realized \$814,967 from the sale of buildings and equipment which we used before we moved into our current facility in 2009. The cash from that sale offset the \$255,749 that we spent on property and equipment in 2011.

Net cash provided by (used in) financing activities.

Net cash provided by financing activities for the year ended December 31, 2012 was \$4,002,950. This is primarily attributable to \$3,743,218 of proceeds from loans and \$100,970 of proceeds from unrelated party loan.

In contrast, net cash used in financing activities for the year ended December 31, 2011 was \$2,781,708, as we reduced the balance of our short-term loans by \$1,159,168 and the balance of our shareholder loan by \$1,639,727.

#### **Future Capital Expenditures**

On April 10, 2009, we signed the VIE Agreements to acquire the exploration rights of the Dashuigou area and the mining rights of the Majiahou mine. We expect to invest in exploration, mining equipment, and refinery facility in the future so that we can source tellurium internally. Additional capital for this objective will be required that is in excess of our current resources, requiring us to raise additional capital through future equity offerings or secured or unsecured debt financing. The availability of additional capital resources will depend on prevailing market conditions, interest rates, and our existing material financial position and results of operations.

**Off-Balance Sheet Transactions** 

We have no material off-balance sheet transactions.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not Applicable.

# ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to the Consolidated Financial Statements

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F-1	Report of Independent Registered Public Accounting Firm.
F-2	Consolidated Balance Sheets as of December 31, 2012 and 2011.
F-3	Consolidated Statements of Comprehensive Loss for the Years Ended December
	31, 2012 and 2011.
F-4	Consolidated Statements of Changes in Stockholders' Equity for the Years Ended
	December 31, 2012 and 2011.
F-5	Consolidated Statements of Cash Flows for the Fiscal Years Ended December 31,
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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Apollo Solar Energy, Inc.

We have audited the accompanying consolidated balance sheets of Apollo Solar Energy and subsidiaries (the "Company") as of December 31, 2012 and 2011 and the related consolidated statements of comprehensive loss, stockholders' equity, and cash flows for the years then ended. The Company's management is responsible for these consolidated financial statements. Our responsibility is to express an opinion on these consolidated 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. Our audits of the consolidated financial statements include 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. We believe that our audit provides 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 Apollo Solar Energy, Inc. and subsidiaries as of December 31, 2012 and 2011 and the results of their operations and cash flows for each of the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As shown in Note 2 to the accompanying financial statements, the Company has negative working capital of \$7,497,221, did not generate cash from its operations, and had operating loss for past two years. These circumstances raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/Paritz & Company, P.A.

Hackensack, New Jersey May 9, 2013

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# APOLLO SOLAR ENERGY, INC CONSOLIDATED BALANCE SHEETS

	Decem 2012	ber 31, 2011
ASSETS	2012	2011
Current Assets		
Cash	\$940,225	\$363,771
Accounts receivable, net of allowance of \$18,872 and \$57, 994	339,648	804,577
Inventories	3,202,724	4,065,987
Prepaid expenses and other current assets	353,605	1,001,660
Total Current Assets	4,836,202	6,235,995
		, ,
Long-term Assets		
Property, machinery and mining assets, net	16,853,702	20,370,831
Assets held for sale	-	924,765
Non-marketable investment	55,546	55,506
Investment in and advances to Joint Venture	5,425,577	581,963
Total Long-term Assets	22,334,825	21,933,065
Total Assets	\$27,171,027	\$28,169,060
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Short-term loans	\$7,797,845	\$4,050,374
Account payable - trade	261,953	202,853
Account payable - construction vendors	1,164,411	1,493,155
Accrued expenses and other current liabilities	2,735,892	2,677,948
Due to stockholders and related parties	373,322	214,213
Total Current Liabilities	12,333,423	8,638,543
Total Carrent Entonities	12,333,123	0,030,313
Long-term liabilities		
Convertible loan	100,970	-
Total liabilities	12,434,393	8,638,543
Stockholders' Equity		
Preferred stock:	-	-
\$0.001 par value, 25,000,000 shares authorized; 0 shares issued and outstanding as of		
December 31, 2012 and December 31, 2011		
Common stock:	51,796	51,796
\$0.001 par value, 100,000,000 shares authorized; 51,795,961 shares issued and		
49,377,038 shares outstanding as of December 31, 2012 and 2011	22 022 (41	22 (00 042
Additional paid-in capital	33,032,641	32,609,043
Treasury stock 2,418,923 shares at cost Accumulated deficit	(5,216,770)	(5,216,770)
	(16,125,326)	(10,897,576)
Accumulated other comprehensive income	2,994,293	2,984,024
Total Stockholders' Equity	14,736,634	19,530,517

Total Liabilities and Stockholders' Equity

\$27,171,027

\$28,169,060

See accompanying notes to the consolidated financial statements

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# APOLLO SOLAR ENERGY, INC CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	For the Ye Deceming 2012	
	2012	2011
Sales	\$4,484,708	\$10,369,260
Cost of goods sold	(4,850,113)	(8,884,367)
Gross profit (loss)	(365,405)	1,484,893
Operating expenses:		
General and administrative expenses	3,292,124	4,213,495
Selling expense	271,575	369,092
Research and development expenses	1,265,423	934,583
Impairment on assets held for sale	925,086	221,143
Total operating expenses:	5,754,208	5,738,313
Operating loss	(6,119,613)	(4,253,420)
Other income (expense)		
Interest income-related party	-	837,359
Interest expense, net of interest income	(1,054,240)	(272,619)
Income (loss) in equity in Joint Venture	7,496	(80,058)
Gain on investment in Joint Venture	2,041,525	-
Total other income	994,781	484,682
Loss before provision for income taxes	(5,124,832)	(3,768,738)
Provision for income taxes	102,918	-
Net loss	(5,227,750)	(3,768,738)
Other comprehensive loss		
Foreign Currency Translation Adjustment	10,269	963,429
Comprehensive loss	\$(5,217,481)	\$(2,805,309)
Loss per share		
Basic	\$(0.11)	\$(0.08)
Diluted	\$(0.11)	\$(0.08)
Weighted average shares outstanding		
Basic	49,377,038	49,819,684
Diluted	49,377,038	49,819,684
Diluto	17,511,050	17,017,007

See accompanying notes to the consolidated financial statements

# Apollo Solar Energy Inc. CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Common Share	n stock Amount	Additional Paid-in Capital	Treasury Stock	Accumulated Deficit	Accumulated Other Comprehensive Income	Total e Stockholders' Equity
Balance as of December 31, 2010	51,655,961	\$ 51,656	\$ 31,709,395	\$ -	\$ (7,128,838	\$ 2,020,595	\$ 26,652,808
Acquisition of treasury stock for repayment of loan from							
related party Issuance of	-	-	-	(5,216,770)			(5,216,770)
new shares for services	140,000	140	305,060			-	305,200
Issuance of option for services		_	594,588			_	594,588
Foreign currency translation			371,300				371,300
adjustment	-	-	-			963,429	963,430
Net loss	-	-	-		(3,768,738	) -	(3,768,739)
Balance as of December				( · c o )	(40.00- 5-4)		
31, 2011	51,795,961	51,796	32,609,043	(5,216,770)	(10,897,576)	) 2,984,024	19,530,517
Issuance of option for							
services	-	-	423,598	-			423,598
Foreign currency translation adjustments			_	_		10,269	10,269
Net loss	_	_	-		(5,227,750		(5,227,750)
Balance as of December	51 505 061	ф. <b>51.7</b> 0.6	Ф 22 022 (4)	ф <i>(</i> 5.21 с.330)			
31, 2012	51,795,961	\$ 51,796	\$ 33,032,641	\$ (5,216,770)	\$ (16,125,326)	) \$ 2,994,293	\$ 14,736,634

See accompanying notes to the consolidated financial statements

# APOLLO SOLAR ENERGY, INC CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Years Ended December 31, 2012 2011

# Cash flows from operating activities:

Net Loss	\$(5,227,750)	\$(3,768,738)
Adjustments to reconcile net loss to net cash provided by operating activities:	-	( , , , , , , , , , , , , , , , , , , ,
Stock-based compensation	423,598	899,788
Interest income from related party loan	-	(837,359)
Gain on investment in Joint Venture	(2,041,525)	-
Income in equity of Joint Venture	(7,496)	80,058
Deferred tax assets	-	(25,329)
Inventory allowance	202,238	-
Depreciation and amortization	934,155	969,442
Impairment of assets held for sale	925,093	220,189
Loss on sale of assets	-	133,119
Provision for bad debts	113,992	53,054
Changes in operating assets and liabilities:		
Accounts receivable	504,481	(537,589)
Inventory	663,606	2,990,194
Prepaid expenses and other current assets	495,390	(161,258)
Accounts payable-trade	58,933	(185,743)
Accounts payable-construction	(329,688)	(1,448,943)
Accrued expenses and other current liabilities	56,532	1,506,748
Net cash used in operating activities	(3,228,441)	(112,367)
Cash flows from investing activities:		
Proceeds from sale of assets	-	814,967
Acquisition of property and equipment	(197,019 )	(255,749)
Net cash provided by (used in) investing activities	(197,019 )	559,218
•		
Cash flows from financing activities:		
Proceeds from (repayment of) short-term loans	3,743,218	(1,159,168)
Proceeds from convertible loan	100,970	-
Proceeds from (repayment of) stockholder loan	199,733	(1,639,727)
Due to related parties	(40,971)	17,187
Net cash provided by (used in) financing activities	4,002,950	(2,781,707)
Effect of exchange rate changes on cash	(1,036)	22,452
Net increase (decrease) in cash	576,454	(2,312,405)
		,

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Cash at beginning of year	363,771	2,676,176
Cash at end of year	\$940,225	\$363,771
Supplemental disclosure of cash flow information		
Income tax paid in cash	\$102,918	\$18,956
Interest expense	\$432,030	\$263,395
Non-cash financing activities		
Treasury stock acquired in satisfaction of loans to related parties	\$-	\$5,216,770
Non-cash investing activities		
Assets transferred to Joint Venture	\$2,793,226	\$-
Assets sold	\$-	\$971,537

See accompanying notes to the consolidated financial statements

# APOLLO SOLAR ENERGY, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011

#### NOTE 1. BUSINESS DESCRIPTION AND BASIS OF PRESENTATION

Apollo Solar Energy, Inc. ("the Company") develops and manufactures high purity metals and compounds which are widely used in the field of national defense, navigation, spaceflight and the electronic industry. In addition, the Company is developing semiconductor, photoelectrical, photoconductive and photovoltaic basic materials for thin film solar cells. The Company owns the exclusive rights to the Dashuigou tellurium mine through at least January 2013.

The company entered into various exclusive contractual arrangements on April 10, 2009 with Sichuan Xinju Mineral Resources Development Corporation ("XMR"), or the VIE, and certain of its shareholders who are our direct or indirect employees and who collectively own 51.6619% of the VIE. Among other things, these agreements granted to our wholly-owned subsidiary a first option to purchase the exploration rights related to the Dashuigou area mine and the mining rights related to that certain tellurium and bismuth mine in Shimian Majiagou Additionally, the VIE and certain of its shareholders who collectively own 51.6619% of the VIE granted to our wholly-owned subsidiary an exclusive right to purchase all of the products produced from the Mining Business for a specified period of time. The Company considered the terms of its interest in XMR and determined that it was a VIE in accordance with ASC 810-10-55 and that it should be consolidated with the Company.

## Basis of presentation

The accompanying consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States of America ("US GAAP").

The consolidated financial statements include the accounts of the Company, its wholly owned subsidiaries, its equity method investment (see Note 7) and XMR, a Variable Interest Entity ("VIE").

All significant inter-company transactions and balances among the Company and its subsidiaries are eliminated upon consolidation. Certain amounts included in 2011 financial statements have been reclassified to conform to the 2012 financial statements presentation.

The Company's functional currency is the Chinese Renminbi ("RMB"); however, the accompanying financial statements have been translated and presented in United States Dollars ("USD").

#### NOTE 2. GOING CONCERN

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As shown in the accompanying financial statements, the Company has negative working capital of \$7,497,221, did not generate cash from its operations, and has had operating losses for past two years. These circumstances, among others, raise 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.

Management plans to increase its marketing in order to generate more revenues and to reduce certain other operating expenses. Nevertheless, for our next fiscal year, we anticipate our cash flow from operations to improve. The Company anticipates that its current cash position will be insufficient to support the Company's operations at current

capacity for the next twelve month period and, therefore, will need to seek additional financing of its operations. We may rely on bank borrowing as well as capital issuances and loans from existing shareholders. We are actively exploring various proposals and alternatives in order to secure sources of financing and improve our financial position. We may raise such additional capital through the issuance of our equity securities, which may result in significant dilution to our current investors. We are also exploring potential strategic partnerships, which could provide a capital infusion to the Company.

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# APOLLO SOLAR ENERGY, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011

#### NOTE 3. SIGNIFICANT ACCOUNTING POLICIES

#### Use of Estimates

The preparation of the financial statements in conformity with Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates. These estimates and assumptions include valuing equity securities issued in share based payment arrangements, determining the fair value of our common stock, the collectability of accounts receivable and deferred taxes and related valuation allowances. Certain of our estimates, including evaluating the collectability of accounts receivable, could be affected by external conditions, including those unique to our industry, and general economic conditions. It is possible that these external factors could have an effect on our estimates that could cause actual results to differ from our estimates. We re-evaluate all of our accounting estimates at least quarterly based on these conditions and record adjustments when necessary.

## Cash and Cash equivalents

The Company maintains cash with financial institutions in the People's Republic of China ("PRC") which are not insured or otherwise protected. Should any of these institutions holding the Company's cash become insolvent, or if the Company is unable to withdraw funds for any reason, the Company could lose the cash on deposit with that institution.

Cash and cash equivalents includes cash in hand and cash in time deposits, certificates of deposits and all highly liquid debt instruments with original maturities of three months or less.

#### Accounts Receivable

We have a policy of reserving for uncollectible accounts based on our best estimate of the amount of probable credit losses in our existing accounts receivable. We extend credit to our customers based on an evaluation of their financial condition and other factors. We generally do not require collateral or other security to support accounts receivable. We perform ongoing credit evaluations of our customers and maintain an allowance for potential bad debts if required.

We determine whether an allowance for doubtful accounts is required by evaluating specific accounts where information indicates the customers may have an inability to meet financial obligations. In these cases, we use assumptions and judgment, based on the best available facts and circumstances, to record a specific allowance for those customers against amounts due to reduce the receivable to the amount expected to be collected. These specific allowances are re-evaluated and adjusted as additional information is received. The amounts calculated are analyzed to determine the total amount of the allowance. We may also record a general allowance as necessary.

Direct write-offs are taken in the period when we have exhausted our efforts to collect overdue and unpaid receivables or otherwise evaluate other circumstances that indicate that we should abandon such efforts.

#### Inventories

Inventories are valued at the lower of cost or net realizable value with cost determined on the weighted-average method. Work in progress and finished goods are composed of direct material, direct labor and a portion of manufacturing overhead. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs to complete and dispose.

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# APOLLO SOLAR ENERGY, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011

#### Advance for purchases

The Company made interest free advances to certain vendors for purchase of its raw materials and construction in progress equipment.

Property, machinery and mining assets

Property and equipment are recorded at cost. Once placed in service, depreciation is provided in amounts sufficient to amortize the cost of the related assets over their useful lives using the straight line method. Land use right is amortized over the lease period.

Maintenance, repairs and minor renewals are charged to expense when incurred. Replacements and major renewals are capitalized.

Expenditures for new facilities or equipment and expenditures that extend the useful lives of existing facilities or equipment are capitalized and depreciated using the straight-line method at rates sufficient to depreciate such costs over the estimated productive lives.

Mineral exploration costs are expensed according to the term of the license granted to the Company by the PRC. Extraction rights are stated at the lower of cost and recoverable amount. When extraction rights are obtained from the government according to the mining industry practice in the PRC, no development costs will be capitalized, or subsequently amortized, until the company determines the existence of reserves pursuant to Industry Guide 7. At the Company's underground mines, these costs include the cost of building access ways, shaft sinking and access, lateral development, drift development, ramps and infrastructure development.

#### Impairment of long-lived assets

Long-lived assets are reviewed for impairment when circumstances indicate the carrying value of an asset may not be recoverable. For assets that are to be held and used, impairment is recognized when the estimated undiscounted cash flows associated with the asset or group of assets is less than their carrying value. If impairment exists, an adjustment is made to write the asset down to its fair value, and a loss is recorded as the difference between the carrying value and fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. Assets to be disposed of are carried at the lower of carrying value or estimated net realizable value.

#### Investments

The Company accounts for non-marketable investments (including investment in Joint Venture) using the equity method of accounting if the investment gives us the ability to exercise significant influence over, but not control of, an investee. Significant influence generally exists if the Company has an ownership interest representing between 20% and 50% of the voting stock of the investee. Under the equity method of accounting, investments are stated at initial cost and are adjusted for subsequent additional investments and our proportionate share of earnings or losses and distributions. The Company records it share of the investee's earnings or losses in earnings (losses) from unconsolidated entities, net of income taxes in the accompanying consolidated statements of operations. The

Company evaluates it equity method investment for impairment when events or changes in circumstances indicate, in management's judgment, that the carrying value of such investment may have experienced other than temporary decline in value. When evidence of loss in value has occurred, management compares the estimated fair value of the investment to the carrying value of the investment to determine whether an impairment has occurred. If the estimated fair value is less than the carrying value and management considers the decline in value to be other than temporary value, the excess of the carrying value over the estimated fair value is recognized in the financial statements as an impairment.

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#### Investments (continued)

The Company accounts for non-marketable investment using the cost method of accounting if the Company has an ownership interest below 20% and does not have the ability to exercise significant influence over an investee.

#### Convertible Instruments

We evaluate and account for conversion options embedded in convertible instruments in accordance with ASC 815 "Derivatives and Hedging Activities". Applicable GAAP requires companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. The criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under other GAAP with changes in fair value reported in earnings as they occur and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument.

We account for convertible instruments (when we have determined that the embedded conversion options should not be bifurcated from their host instruments) as follows: We record when necessary, discounts to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized over the term of the related debt to their stated date of redemption.

#### **Stock-Based Compensation**

We recognize compensation expense for stock-based compensation in accordance with ASC Topic 718. For employee stock-based awards, we calculate the fair value of the award on the date of grant using the Black-Scholes method for stock options and the quoted price of our common stock for unrestricted shares; the expense is recognized over the service period for awards expected to vest. For non-employee stock-based awards, we calculate the fair value of the award on the date of grant in the same manner as employee awards, however, the awards are revalued at the end of each reporting period and the pro rata compensation expense is adjusted accordingly until such time the nonemployee award is fully vested, at which time the total compensation recognized to date equals the fair value of the stock-based award as calculated on the measurement date, which is the date at which the award recipient's performance is complete. The estimation of stock-based awards that will ultimately vest requires judgment, and to the extent actual results or updated estimates differ from original estimates, such amounts are recorded as a cumulative adjustment in the period estimates are revised. We consider many factors when estimating expected forfeitures, including types of awards, employee class, and historical experience.

#### Deferred income taxes

We use the asset and liability method of accounting for income taxes in accordance with ASC Topic 740, "Income Taxes." Under this method, income tax expense is recognized for the amount of: (i) taxes payable or refundable for the current year and (ii) deferred tax consequences of temporary differences resulting from matters that have been recognized in an entity's financial statements or tax returns. Deferred tax assets and liabilities are measured using

enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is provided to reduce the deferred tax assets reported if based on the weight of the available positive and negative evidence, it is more likely than not some portion or all of the deferred tax assets will not be realized.

ASC Topic 740.10.30 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. ASC Topic 740.10.40 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. We have no material uncertain tax positions for any of the reporting periods presented.

### Currency translation

Since the Company operates in the PRC, the Company's functional currency is the RMB. Revenue and expense accounts are translated at the average rates during the period, and assets and liabilities are translated at year-end rates and equity accounts are translated at historical rate. Translation adjustments arising from the use of different exchange rates from period to period are included as a component of stockholders' equity. Gains and losses from foreign currency transactions are recognized in current operations.

#### Fair value of financial instruments

We have adopted the provisions of ASC Topic 820, "Fair Value Measurements and Disclosures", which defines fair value as used in numerous accounting pronouncements, establishes a framework for measuring fair value and expands disclosure of fair value measurements.

The estimated fair value of certain financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses are carried at historical cost basis, which approximates fair values because of the short-term maturing of these instruments. The carrying amounts of our short and long term credit obligations approximate fair value because the effective yields on these obligations, which include contractual interest rates which are comparable to rates of returns for instruments of similar credit risk and because of the short term maturity of these instruments.

ASC 820 defines fair value as 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 on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. ASC 820 describes three levels of inputs that may be used to measure fair value:

- Level 1 quoted prices in active markets for identical assets or liabilities.
- Level 2 quoted prices for similar assets and liabilities in active markets or inputs that are observable
- Level 3 inputs that are unobservable (for example cash flow modeling inputs based on assumptions)

We have no financing Assets or Liabilities measured at fair value on a recurring basis.

#### Segment reporting

The Company is using "management approach" model for segment reporting. The management approach model is based on the way a company's management organized segments within the company for making operating decisions and assessing performance. Reportable segments are based on products and services, geography, legal structure, management structure, or any other manner in which management disaggregates a company.

#### Revenue recognition

Revenue is recognized at the date of shipment to customers when a formal arrangement exists, the price is fixed or determinable, the delivery is completed, and no other significant obligations of the Company exist and collectability is reasonably assured. Payments received before all of the relevant criteria for revenue recognition are satisfied and recorded as advances from customers. No revenues have been recognized in the mining segment or manufacturing segment.

#### Research and development

Research and development expenditures are charged to operations as incurred. Research and development expenditures were \$1,265,423 and \$934,583 for the years ended December 31, 2012 and 2011.

# Advertising expense

Advertising and promotional costs are expensed as incurred.

#### Comprehensive income

Comprehensive income is defined to include all changes in equity except those resulting from investments by shareholders and distributions to shareholders. Among other disclosures, all items that are required to be recognized under current accounting standards as components of comprehensive income are required to be reported in a financial statement that is presented with the same prominence as other financial statements. Comprehensive income includes net income and the foreign currency translation gain, net of tax.

#### Loss per share

Basic losses per share are computed by dividing losses available to common shareholders by the weighted-average number of common shares outstanding during the period. Diluted losses per share are computed similar to basic earnings per share, except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive. As a result of the net loss in 2012 and 2011, the calculation of diluted loss per share does not include the dilutive effect to stock options.

#### Recently issued accounting pronouncements

In 2012 the company adopted the provisions of Accounting Standards Update (ASU) 2011-05, "Presentation of Comprehensive Income" (ASU 2011-05) that requires presentation of all non-owner changes in equity in one continuous statement of comprehensive income or in two separate but consecutive statements. The amendments in this update do not change the items that must be reported in OCI or when an OCI item must be reclassified to net income. The adoption of ASU 2011-05 did not affect our consolidated statements of financial position, results of operations and cash flows.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's consolidated financial statements upon adoption.

#### **NOTE 4. INVENTORIES**

The inventories consist of the following:

	As o	of
	December 31,	December 31,
	2012	2011
Raw Materials	\$ 765,637	\$ 719,635
Work-in-progress	860,535	1,322,666
Finished goods	1,576,552	2,023,686
Total	\$3,202,724	\$4,065,987

The Company recorded inventory markdown allowances of \$202,238 and \$0 for the years ended December 31, 2012 and 2011, respectively.

#### NOTE 5. PROPERTY, MACHINERY AND MINING ASSETS, NET

A summary of property and equipment and the estimated lives used in the computation of depreciation and amortization is as follows:

				As of	
	Estimated	De	ecember 31,		December 31,
	lives (years)		2012		2011
Buildings	40	\$	13,431,167		\$13,703,613
Right to use land	50		1,796,206		4,326,310
Machinery and equipment	10		3,905,752		3,672,942
Office equipment	5		436,658		368,864
Vehicle	5-10		602,732		602,302
Mining	5-40		580,778		578,699
Leasehold improvement	5		64,116		-
Construction in progress			728,281		1,047,891
Sub-total			21,545,690		24,300,621
Less: Accumulated depreciation			(4,691,988	)	(3,929,790)
Total		\$	16,853,702		\$20,370,831

Depreciation and amortization expenses for the years ended December 31, 2012 and 2011 were \$934,155 and \$969,442, respectively.

#### NOTE 6. ASSET HELD FOR SALE

The Company acquired battery panels in April 2010 for a proposed solar power project. Subsequently, the Company discontinued the proposed project and reclassified those battery panels from property, machinery and mining assets to asset held for sale. The battery panels were purchased for \$1,438,000. Impairment loss of \$274,675 and \$220,189 were recorded in 2010 and 2011, respectively.

During the year ended December 31, 2012, based on current and anticipated market condition, the Company decided to record an additional impairment charge of \$925,093, which reduced its carrying value to zero.

#### NOTE 7. EQUITY METHOD INVESTMENT IN JOINT VENTURE

On November 9, 2009, Sichuan Apollo Solar Science & Technology Co. Ltd. ("Sichuan Apollo"), a wholly-owned foreign subsidiary of the Company, entered into a joint venture agreement (the "Agreement") with Bengbu Design & Research Institute for Glass Industry ("Bengbu") and a local Chinese government agency (the "Agency"). The Joint Venture ("JV") was formed to conduct research and development related to glass used in the production of thin film solar cells and manufacture thin film solar cells. The Company accounts for this investment under the equity method of accounting.

Under the terms of the agreement, Benghu and the Agency own an aggregate of 65% of the JV and Sichuan Apollo owns the remaining 35%. The JV was formed with a cash contribution by Bengbu and the Agency and the

contribution by Sichuan Apollo of assets consisting of land, a manufacturing plant, equipment and three patents. with a net book value of approximately \$1.7 million with a fair market value of RMB 49,980,000 (approximately \$7.3 million). In addition, under the terms of the agreement, responsibility for debt of Sichuan Apollo aggregating RMB 37,170,000 (approximately \$5,444,500) owed to the Agency was assigned to the JV. The fair market value of the net assets contributed by Sichuan Apollo, as determined by Sichuan Apollo's management giving consideration to the valuation services provided by an independent third party, was equal to 35% of the aggregate contribution of the three parties to the JV.

#### NOTE 7. EQUITY METHOD INVESTMENT IN JOINT VENTURE (continued)

As of December 31, 2012, all parties has finished the total capital contribution of RMB142,800,000 (approximately \$22.7 million) to JV per agreement. In accordance with ASC 805-40, Sichuan Apollo has reported a gain on the difference between the cost of its investment in the JV and the Company's proportionate share of the fair value of the JV's net equity, an amount which, if the JV were treated as a consolidated subsidiary, would have resulted in negative goodwill to be recorded as a gain. This resulted in an excess of the proportionate share of the JV's net assets at fair market value over the cost of the assets contributed by Sichuan Apollo, which was reported as income on the Company statement of operations. The Company contributed its assets over time and recognized its proportional gain during the periods in which it contributed the assets. During the years ended December 31, 2012, 2011, 2010 and 2009, the Company recognized a gain of \$2,041,525, \$0, \$730,572 and \$3,977,511, respectively. All gain has been recognized as of December 31, 2012.

Summarized financial information for our investment in JV assuming a 100% ownership interest is as follows:

December 31,			
201	12	201	11
\$	10,496,699	\$	7,417,092
	11,023,997		5,081,459
	6,668,718		6,630,766
	-		396,474
\$	14,851,978	\$	5,471,311
Year Ended December 31			nber 31
	2012		2011
\$	26,359		\$ 21,075
	9,045		2,086
	21,416		(228,737)
\$	21,416		\$ (228,737)
	\$	\$ 10,496,699 11,023,997 6,668,718 - \$ 14,851,978 Year Ended 2012 \$ 26,359 9,045 21,416	\$ 10,496,699 \$ 11,023,997 6,668,718 - \$ 14,851,978 \$ \$ Year Ended Decer 2012 \$ 26,359 9,045 21,416

#### NOTE 8. NON-MARKETABLE SECURITIES

On March 12, 2009, the Company entered into an agreement to invest RMB300,000 (equivalent to \$43,900 at date of signing), for a 6% interest, with two non-affiliates to establish a new company engaged in the green energy industry. The Company accounted for this investment using the cost method of accounting.

In September 2010, the Company entered into an agreement to invest RMB50,000 (equivalent to \$7,472 at date of signing), with four non-affiliates to establish a new research institute engaged in the green energy industry based in Chengdu. The Company accounted for this investment using the cost method of accounting.

# NOTE 9. PREPAID EXPENSES AND OTHER SUNDRY CURRENT ASSETS

	Г	December	
		31,	December 31,
		2012	2011
Advances for purchases	\$	221,985	\$ 908,760
Other receivable		131,620	92,900
Total	\$	353,605	\$1,001,660

# NOTE 10. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities are listed as below:

	As of December 31,			
		2012		2011
Accrued Interest	\$	824,704	\$	819,418
Salaries and benefits		161,094		275,194
Other taxes		344,596		715,277
Professional fees		148,640		102,779
Other payables		479,834		342,303
Accrued research and development expenses		625,000		375,000
Advance from customers		152,024		47,977
Total	\$	2,735,892	\$	2,677,948

## NOTE 11. SHORT-TERM LOAN

The short-term loans for 2012 and 2011 include the following:

	Balance at December 31, 2012 2011			*
1) Loan payable to Chengdu Xihang Gang Construction & Investment Co., Ltd. due on demand, without interest collateralized by certain plant equipment of Sichuan Apollo.	\$	655,441	\$	654,974
2) Loan payable to Bank of Communication, Chengdu branch due on July 29, 2012, with interest at 8.53% per annum, collateralized by the buildings and land use right of Diye. The loan was paid in full on July 27, 2012.		-		317,179
3) Loan payable to Bank of China, Xihanggang Branch, Chengdu due on August 22, 2013, with interest at 8.4% per annum, collateralized by the Buildings of Sichuan Apollo.		730,031		792,947
4) Loan payable to Bank of China, Xihanggang Branch, Chengdu due on September 17, 2013, with interest at 8.4% per annum, collateralized by the buildings of Sichuan Apollo.		698,290		697,794

5) Loan payable to Bank of China, Xihanggang Branch, Chengdu due on, December 25, 2012, with interest at 7.74% per annum, collateralized by the buildings of Sichuan Apollo. The loan was paid in full on December 25, 2012.	_	1,585,894
6) Loan payable to Bank of China, Xihanggang Branch, Chengdu, due on March 28, 2012, with interest of 6.73% per annum. The loan was paid in full in March 2012.	-	1,586
7) Loans payable to Industrial and Commercial Bank of China, due on November 19, 2013 and December 3, 2013, with interest of 6.6% and 6.00% per annum, respectively, collateralized by the land of Sichun Apollo and its 100% ownership of Xinlong,	3,015,347	_
8) Loan payable to Bank of China, Xihanggang Branch, Chengdu, due on September 20, 2013	793	-
9) Loan payable to an unrelated party, non-interest-bearing and due on March 24, 2013.	1,428,323 *	_
10) Loan payable to Wuhan Economic Development Group through Industrial and Commercial Bank of China, Huangpu Branch, Wuhan due on March 31, 2013, with interest at 7.5% per annum, collateralized by Sichuan Xinlong's 100% ownership in Shimian.	1,269,620 *	_
Total	\$ 7,797,845	\$ 4,050,374

<sup>\*</sup> These loans are currently in default. Management and the lender are negotiating to extend the terms of these loans, but there is no assurance that they will be extended.

#### NOTE 12. DUE TO RELATED PARTIES

The amounts due to related parties are as follows:

	As of December 31			
	2012	2011		
Due to (from) Xinju	\$ (37,704)	\$ 2,992		
Due to stockholder	411,026	211,221		
Total	\$ 373,322	\$ 214,213		

Xinju is a related party partially owned by the second largest shareholder of Apollo, Renyi Hou. All the above loans are non-interest bearing and due on demand.

#### NOTE 13. CONVERTIBLE LOAN

On October 31, 2012, the Company entered into a Loan Agreement with Golden Bridge Education Inc., pursuant to which the Company may borrow up to \$500,000. Pursuant to the Agreement, the lender has an option to convert the loan balance into the Company's common stock before October 31, 2013 at \$2 per share. This loan has an annual interest rate of 10% and a term of 5 years. The loan is collateralized by 2% of the ownership of the Joint Venture referred to in Note 7. The Company borrowed \$100,970 and \$299,030 during December 2012 and January 2013, respectively. The Company evaluated the conversion option of this loan and determined that it does not contain an embedded derivative instrument.

#### NOTE 14. STOCK INCENTIVE PLAN

The Company adopted the Apollo Solar Energy, Inc. Stock Incentive Plan pursuant to which the Company may issue up to 6,675,000 shares of the Company's common stock. The plan administrator has the authority, in its sole discretion, to determine the type or types of award including, but not limited to, Incentive Stock Options, Non Qualified Stock Options, Performance Options, Performance Stock Awards, and Restricted Stock Awards.

The exercise price of Incentive Stock Options cannot be less than the fair market value of the Common Stock on the date of grant. The term of Options granted under the plan is established by the plan administrator, or if not established is 10 years.

During the year ended December 31, 2010, the Company issued 2,000,000 options to three employees.

The Company uses the Black-Scholes option pricing model to calculate the fair value of stock options. The Company recognizes stock-based compensation expense on a straight-line basis over the requisite service period of the award.

#### NOTE 14. STOCK INCENTIVE PLAN (continued)

The key assumptions for the Black-Scholes valuation method include the expected life of the option, stock price volatility, a risk-free interest rate, and dividend yield. Many of these assumptions are judgmental and highly sensitive. Following is a table of the weighted-average Black-Scholes value of our stock option grants, and the key weighted-average assumptions used in the valuation calculations for the options granted.

Weighted-average Black-Scholes value Black-Scholes Assumptions:

Expected lives	3 years	
Expected volatility	40	%
Risk-free interest rate	2	%
Dividend yield	-	

A summary of options under the Stock Incentive Plan as of December 31, 2012 and 2011, and changes during the years then ended is as following:

		Weighted		
		Average	Remaining	Average
		Shares		
		Exercise	Contractural	Instrinsic
	Shares	Price	Term	Value
Outstanding at January 1, 2011	2,080,000	\$ 3.43	2.75 years	810,010
Granted				
Exercised				
Forfeited or expired				
Outstanding at December 31,				
2011	2,080,000	\$ 3.43	1.75 years	-
Granted				
Exercised				
Forfeited or expired	(456,944)			
Outstanding at December 31,				
2012	1,623,056	\$ 3.43	0.75 years	-

A summary of the status of non-vested options as of December 31, 2012 and 2011 and changes during the years then ended is as follows:

		We	eighted
		Av	erage
		Exe	ercise
	Shares	Pri	ce
Nonvested at January 1, 2011	1,883,000	\$	3.49
Granted	-		-
Vested	(641,667)	\$	3.6

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Forfeited or expired	-	
Nonvested at December 31, 2011	1,241,667 \$	3.34
Granted	- \$	-
Vested	(451,389)\$	3.49
Forfeited or expired	(456,944)	3.47
Nonvested at December 31, 2012	333,334 \$	3.50

No options were exercised during the year ended December 31, 2012 and 2011. 456,944 options issued to our former CFO and COO were forfeited during the year ended December 31, 2012 as their employment agreements were terminated.

#### NOTE 15. TAXES

#### Corporation income tax

The Company is incorporated in the United States of America and is subject to United States federal taxation. No provisions for income taxes have been made, as the Company had no U.S. taxable income for the year ended December 31, 2012 and 2011.

The Company's Chinese subsidiaries are governed by the Income Tax Law of the PRC concerning the privately run and foreign invested enterprises, which are generally subject to tax at a statutory rate of 25% on income reported in the statutory financial statements after appropriate tax adjustments.

On July 16, 2009, one of our wholly owned subsidiaries, Sichuan Xinlong received PRC government approval on the High-Tech Enterprise Certificate which allowed us to enjoy a favorable tax rate of 15% effective January 1, 2009 and through December 31, 2011. From January 1, 2012, Sichuan Xinlong is subject to tax rate of 25% on income reported in the statutory financial statements after appropriate tax adjustments.

The comparison of income tax expense at the U.S. statutory rate of 35% in 2012 and 2011, to the Company's effective tax is as follows:

	Years ended December 31,			
		2012		2011
U.S. Statutory rate of 35%	\$	(1,793,692)	\$	(1,318,588)
Tax rate difference between China and U.S.	Ψ	. , , ,	φ	
		425,418		400,832
Change in valuation allowance		1,170,407		914,431
Net operating loss expired		197,867		32,579
Foreign tax paid for prior periods		102,918		26,657
Permanent difference		-		(55,911)
Effective tax	\$	102,918	\$	-

The provisions for income taxes are summarized as follows:

	Years ended December 31			
	2012	2011		
Current	\$ 102,918	\$	25,329	
Deferred	-		(25,329)	
Total	\$ 102,918	\$	-	

#### NOTE 15. TAXES - (continued)

The tax effects of temporary differences that give rise to the Company's net deferred tax asset as of December 31, 2012 and 2011 are as follows:

	December 31			
	2012 2011			2011
Deferred tax assets (liabilities)				
Inventory markdown	\$	115,670	\$	61,939
Bad debt expense		160,448		121,363
Depreciation		47,402		47,402
Accrued taxes and other accruals		289,085		130,859
Loss on impairment		33,500		33,500
Net loss carryforward		4,776,211		3,291,357
Gain on investment in JV		(840,957)		(158,965)
Other		134,743		18,240
Gross deferred tax		4,716,102		3,545,695
Valuation allowance		(4,716,102)		(3,545,695)
Net deferred tax	\$	-	\$	-

Based on management's present assessment, the Company has determined that it is more likely than not a deferred tax asset attributable to the future utilization of the net operating loss carry-forward as of December 31, 2012 will not be realized. Accordingly, the Company has provided a 100% allowance against the deferred tax asset in the financial statements at December 31, 2012 and 2011, respectively. The Company will continue to review this valuation allowance and make adjustments as appropriate.

#### Value added tax ("VAT")

Enterprises or individuals who sell commodities, engage in repair and maintenance or import or export goods in the PRC are subject to a value added tax in accordance with the PRC laws. The value added tax standard rate is 17% of the gross sales price. A credit is available whereby VAT paid on the purchases of semi-finished products or raw materials used in the production of the Company's finished products can be used to offset the VAT due on the sales of the finished products.

#### NOTE 16. PRC STATUTORY RESERVES

In accordance with the PRC Companies Law, the Company is required to transfer 10% of its profit after tax, as determined in accordance with accounting standards and regulations of the PRC, to the statutory surplus reserve. The statutory surplus reserve is non-distributable. As of December 31, 2012 and December 31, 2011, the Company did not accumulate any statutory reserve due to the accumulated deficit.

# NOTE 17. BUSINESS SEGMENTS

The following tables summarize key financial information by segment.

For the year ended December 31, 2012:

	Manufacturing	Refining	Mining	Corporate & Others	Consolidated Total
Revenue	\$ 723,093	\$3,761,615	\$-	\$-	\$ 4,484,708
Operating loss	\$ (1,252,844)	\$(3,596,189)	\$(399,983)	\$(870,597)	\$ (6,119,613)
Depreciation and amortization	\$ 702,889	\$198,540	\$32,726	\$-	\$ 934,155
Capital expenditures	\$ 130,933	\$63,754	\$2,332	\$-	\$ 197,019

For the year ended December 31, 2011:

	Manufacturing	Refining	Mining	Corporate & Others	Consolidated Total
Revenue	\$ -	\$10,334,872	\$-	\$34,388	\$10,369,260
Operating loss	\$ (1,599,556 )	\$(769,667)	\$(263,187)	\$(1,621,010)	\$ (4,253,420)
Depreciation and amortization	\$ 716,125	\$221,633	\$31,684	\$-	\$ 969,442
Capital expenditures	\$ 51,532	\$136,629	\$67,588	\$-	\$ 255,749
Total assets	\$ 13,611,266	\$11,451,316	\$3,105,427	\$1,051	\$ 28,169,060

### NOTE 18. CONCENTRATIONS

Our principal customers are manufacturers of thin-film solar cells, cell modules, and solar electronic products. We also serve additional customers involved in various segments of other electronic materials markets. We still expect our sales to continue to be concentrated among a small number of customers in 2013. However, we also expect that our significant customers may change from time to time.

At December 31, 2012, three customers accounted for 21%, 13% and 10% of the total accounts receivable outstanding, respectively. Two customers in China accounted for 15% and 13% of total sales for the year then ended respectively.

At December 31, 2011, three customers accounted for 19%, 19% and 13 % of the total accounts receivable outstanding, respectively. Three customers accounted for 20%, 13% and 12% of total sales for the year then ended respectively.

In 2012, 90% of our sales were made to customers in Asia, 10.3% of our sales were made to customers in other countries. In 2011, 27% of our sales were made to customers in North America and 72.3% of our sales were made to customers in Asia.

#### NOTE 19. COMMITMENT AND CONTINGENCIES

#### **Employment Agreement**

Effective November 8, 2010, Dr. Jingong Pan, the Company's former Vice President, was appointed as Chairman of the Board of Directors and Chief Executive Officer of the Company. As Chief Executive Officer, Dr. Pan will receive an annual salary of RMB 660,000 in first year. Dr. Pan was also granted stock options to acquire up to 1,000,000 shares of the Company's common stock, which will vest in equal yearly installments over a three year period, provided Dr. Pan remains employed with the Company. The options have an exercise price of \$3.50 per share.

#### NJIT contract

On March 16, 2010, the Company entered into a Joint Research Agreement, or the NJIT Agreement, with the New Jersey Institute of Technology, or NJIT, pursuant to which the Company agreed to pay NJIT sponsorship funds in an aggregate amount of \$1,500,000 over a three-year period. Under the terms of the Agreement, NJIT agreed to provide certain laboratory instruments, equipment and personnel to develop novel CdTe thin film PV technology. The total amount of that agreement was amortized on a straight-line basis over three years. As of June 30, 2012, the Company had paid US\$500,000 in sponsorship fund to NJIT and had accrued an obligation of \$625,000. In July 2012 NJIT terminated the agreement.

#### NOTE 20. VULNERABILITY DUE TO OPERATIONS IN PRC

The Company's operations may be adversely affected by significant political, economic and social uncertainties in the PRC. Although the PRC government has been pursuing economic reform policies for more than twenty years, no assurance can be given that the PRC government will continue to pursue such policies or that such policies may not be significantly altered, especially in the event of a change in leadership, social or political disruption or unforeseen circumstances affecting the PRCs political, economic and social conditions. There is also no guarantee that the PRC government's pursuit of economic reforms will be consistent or effective.

Substantially all of the Company's businesses are transacted in RMB, which is not freely convertible. The Peoples Bank of China or other banks are authorized to buy and sell foreign currencies at the exchange rates quoted by the Peoples Bank of China. Approval of foreign currency payments by the Peoples Bank of China or other institutions requires submitting a payment application form together with suppliers' invoices, shipping documents and signed contracts.

Since the Company has its primary operations in the PRC, the majority of its revenues will be settled in RMB, not USD. Due to certain restrictions on currency exchanges that exist in the PRC, the Company's ability to use revenue generated in RMB to pay any dividend payments to its shareholders outside of China may be limited.

The Company's business depends on maintaining licenses of its current products from the Chinese government. Failure to obtain the necessary licenses when needed can cause the Company's business plan to be delayed.

## NOTE 20. VULNERABILITY DUE TO OPERATIONS IN PRC (continued)

In September 2006, the PRC changed the laws regarding transfer of equity in PRC companies in exchange for equity in non-PRC companies. Approvals and registrations for such transfers are required and penalties may be imposed if the requirements are not met.

#### Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentration of credit risk are primarily cash and cash equivalents.

#### NOTE 21. SUBSEQUENT EVENTS

The Company has reviewed subsequent event through the date of these financial statements issued and has determined that there were no additional material subsequent events occurred through that date need to be recognized or disclosed in these financial statements.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

As required by Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act, our management has carried out an evaluation, with the participation and under the supervision of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2012. Disclosure controls and procedures refer to controls and other procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Interim Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management conducted its evaluation of disclosure controls and procedures under the supervision of our Chief Executive Officer and our Chief Financial Officer. That evaluation disclosed that the Company has material defects in its disclosure controls and procedures. Specifically they determined that there is a lack of expertise in U.S. GAAP among the Company's management personnel. They also determined that the size of the Company's accounting staff and low number of supervisory personnel prevented an appropriate segregation of accounting functions. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that were not effective as of December 31, 2012.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and is effected by the Company's board of directors, management and other personnel, 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, or GAAP, and includes those policies and procedures that:

- · Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit
  preparation of our financial statements in accordance with GAAP, and that our
  receipts and expenditures are being made only in accordance with authorizations of
  management and directors of the Company, and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our 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 polices or procedures may deteriorate.

Management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO. That evaluation disclosed that the Company has material defects in its internal control over financial reporting. Specifically they determined that there is a lack of expertise in U.S. GAAP among the Company's management personnel. They also determined that the size of the Company's accounting staff and low number of supervisory personnel prevented an appropriate segregation of accounting functions. Based on this evaluation, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2012.

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#### Changes in Internal Controls over Financial Reporting

The term "internal control over financial reporting" (defined in SEC Rule 13a-15(f)) refers to the process of a company that is 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. The Company's management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated any changes in the Company's internal control over financial reporting that occurred during the fourth quarter of the year covered by this annual report, and they have concluded that there was no change to the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

#### **PART III**

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

Directors

The following sets forth our current officers and directors and information concerning their age and background:

Name	Age	Positions	<b>Director Since</b>
Jingong Pan	48	Chairman of the Board,	
		Chief Executive Officer	2010
Zhimin Cao	56	Director	2008
Yijin Li	55	Director	2012
Cheng Liu	58	Director	2013
Hua Hui	38	Chief Financial Officer	
Tong Liu	46	Corporate Secretary	

All directors hold office until the next annual meeting of our shareholders and until their successors have been elected and qualified. Officers serve at the pleasure of the Board of Directors.

Dr. Jingong Pan has been Chief Executive Officer and Chairman of the Board since November, 2010 and a director and Vice President of the Company since March 17, 2010. Dr. Pan is currently an Adjunct Professor at the New Jersey Institute of Technology. From 2000 to 2002, Dr. Pan served as a General Manager of Flaming Sun (USA) Corp., and from 1997 to 2000, he served as Vice President of the Bank of China Group. Dr. Pan received a Bachelor of Science degree from the Harbin Institute of Technology, Masters degrees from the Harbin Institute of Technology and the New Jersey Institute of Technology, and a Ph.D. from the New Jersey Institute of Technology. Dr. Pan has been appointed to the Board to provide his expertise in the management of high tech enterprises.

Zhimin Cao has been a director since 2008. From 2000 through the present date, Dr. Cao has been a professor at the College of Marine Geosciences, Ocean University of China. Dr. Cao's research is focused on Economic Geology, Geochemistry, Marine Geology, Submarine Resources Exploring Sensor Technology. From May 2000 to July 2000, Dr. Cao served as a visiting scientist at Colorado State University. Dr. Cao earned his Ph. D., Master's and Bachelor's degree from Chengdu University of Technology, China University of Geosciences and Wuhan University of Geosciences (predecessor of China University of Geosciences), respectively. Dr. Cao has been appointed to the Board

to provide his expertise in geosciences.

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Yijin Li has been a director since December 2012. Since 2008 Professor Li has been employed as a Professor in the Department of Management Information Systems at the Harbin Institute of Technology. From 1994 to 2008, Professor Li served as Dean of the Management School, Harbin Institute of Technology. Professor Li was a visiting scholar at the University of Cologne, Germany in 1996, and a visiting scholar at the University of Hawaii, US in 2003. Professor Li has served as Chairman of various academic and professional associations in China. Professor Li was appointed to the Board to provide his expertise in management of corporate entities.

Cheng Liu has been a director since April 2013. From 2000 until 2010 Mr. Liu was employed as Chairman of Tianyuan Securities Co., Ltd. From 1998 until 2000 Mr. Liu was the President of Heilongjiang Trust and Investment Co., Ltd. In 1996, Mr. Liu was awarded a Masters degree by the Heilongjiang Economics Institute. Cheng Liu is a senior certified public accountant registered in the PRC. Mr. Liu was appointed to the Board to provide his expertise in corporate finance.

Hua Hui was appointed Interim Chief Financial Officer in June 2012. Ms. Hui has served as the Chief Financial Officer of the Company's wholly-owned subsidiary, Sichuan Apollo Solar Science & Technology Co., Ltd., since 2011. From 2004 through 2011, Ms. Hua served as Chief Financial Officer for Sichuan Jinke Public Equipment Manufacturing Company. Ms. Hua received a Bachelor's degree in accounting, Master Degree in accounting and is a Certified Public Accountant.

Tong Liu has served as our Corporate Secretary since January 2011. Ms. Liu has served as the Chief Accounting Officer of Flaming Sun Corp. since May, 2005. Ms. Liu served as controller of Business Administration Association of Ministry of Foreign Trade and Commerce of China from July 1995 until March 2005. Ms. Liu received a Master of Science on Accounting from Harbin Institute of Technology in 1995.

#### Director Independence

The board of directors has determined that Kang Sun, Zhimin Cao and Elliot Maza are each an independent director as defined by the applicable rules of the NYSE Amex.

#### **Board Committees**

Our board of directors has established the following committees: the Audit Committee, the Compensation Committee, and the Nomination and Corporate Governance Committee, each of which operates under a written charter adopted by the board of directors. Our board of directors and its committees set schedules to meet throughout the year and also can hold special meetings and act by written consent from time to time, as appropriate. The committees report on their activities and actions to the board of directors.

The current membership of our board committees is indicated in the table below.

		Compensation	Nominating
	Audit Committee	Committee	Committee
Zhimin Cao	Member	Chairman	Member
Yijin Li	Member	Member	Chairman
Cheng Liu	Chairman	Member	Member

Each of the members of each committee is an independent director. Our board of directors has determined that each member of the Audit Committee meets the independence criteria set forth in the SEC rules for audit committee membership. The board of directors has also determined that at least one member of the audit committee, Mr. Liu, qualifies as an "audit committee financial expert" as defined by the applicable rules of the SEC.

## Section 16(a) Beneficial Ownership Reporting Compliance

None of the officers, directors or beneficial owners of more than 10% of the Company's common stock failed to file on a timely basis the reports required by Section 16(a) of the Exchange Act during the year ended December 31, 2012, except that none of officers or directors has filed a Form 3.

#### Communication with Directors

Shareholders may communicate with the company's directors by transmitting correspondence by mail addressed as follows:

Corporate Secretary c/o Apollo Solar Energy, Inc. No. 485 Tengfei Third, Shuangliu Southwest Airport Economic Development Zone, Shuangliu, Chengdu People's Republic of China, 610207

The Corporate Secretary will, as appropriate, forward communication to the Board or to any individual director, directors or Board committee to whom the communication is directed.

#### Code of Ethics

We have adopted a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer, and persons performing such similar functions. A copy of our code of ethics is attached as an exhibit to our annual report on Form 10-K for fiscal year 2008 filed with the Securities and Exchange Commission on April 15, 2009. If we make any substantive amendments to the code or grant any waiver from a provision of the code to any executive officer or director, we will promptly disclose the nature of the amendment or waiver via any means required by applicable law.

## **Board Leadership Structure**

In accordance with our bylaws, our Board elects our officers, including our Chief Executive Officer, Chief Financial Officer, and such other officers as the Board may appoint from time to time. This Board has not currently separated the positions of Chairman of the Board and Chief Executive Officer, and Mr. Jingong Pan currently serves as both our Chairman of the Board and our Chief Executive Officer.

#### ITEM 11. EXECUTIVE COMPENSATION

#### Compensation Discussion and Analysis

Our Compensation Committee assists our board of directors in reviewing and approving the compensation structure of our directors and executive officers, including all forms of compensation to be provided to our directors and executive officers. With the responsibility of establishing, implementing and monitoring our executive compensation program philosophy and practices, our Compensation Committee seeks to ensure that total compensation paid to our directors and executive officers is fair and competitive.

#### Compensation Philosophy and Objectives

Our Compensation Committee's goals regarding executive compensation are primarily to recruit, hire, retain, motivate and reward. In determining what constitutes a fair and competitive compensation for each executive, our Compensation Committee evaluates individual executive performance with a goal of setting compensation at levels based on the executive's general business and industry knowledge and experience and comparable to executives in other companies of similar size and stage of development, while taking into account our relative performance and our strategic goals.

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We conduct an annual review of the aggregate level of our executive compensation as part of the annual budget review and annual performance review processes. During our review of an individual executive's compensation, our Compensation Committee primarily considers individual performance of that executive and internal review of the executive's compensation, both individually and relative to other executive officers. Our Compensation Committee also considers factors of corporate performance including the stock prices, sales, revenue and the current overall economic situation. Adjustments to salary levels are typically made annually as part of the company's performance review process, as well as upon a change in job responsibility. Merit-based increases to salaries are based on our Compensation Committee's assessment of the individual's performance.

#### **Executive Compensation**

The table below itemizes all compensation for the last three fiscal years paid to our Chief Executive Officer, Jingong Pan. There was no officer of the Company whose salary and bonus for services rendered during the year ended December 31, 2012 exceeded \$100,000.

	Fiscal			Stock	Option	Other	
	Year	Salary	Bonus	Awards	Awards	Compensation	Total
Jingong Pan	2012	\$56,065					\$56,065
	2011	\$73,846			\$294,178		\$368,024
	2010	\$12,117			\$49,030		\$61,147

#### Grants of Plan-Based Awards

There were no equity awards made to a named executive officer in fiscal 2012.

The following table sets forth unexercised stock options, stock that has not yet vested and equity incentive plans awards for each named executive officer outstanding as of the fiscal year ended December 31, 2012.

		Number of	Number of		
		Securities	Securities		
		Underlying	Underlying		
		Unexercised	Unexercised		Option
		Options (#)	Options (#)	Option	Expiration
Name	Grant Date	Exercisable	Unexercisable	Exercise Price	Date
Jingong Pan	11/8/10	666,667	333,333	\$ 3.50	11/8/20

#### **Employment Agreements**

Effective November 8, 2010, Dr. Jingong Pan, the Company's former Vice President, was appointed as Chairman of the Board of Directors and Chief Executive Officer of the Company. As Chief Executive Officer, Dr. Pan will receive an annual salary of RMB 660,000 in first year. Dr. Pan was also granted stock options to acquire up to 1,000,000 shares of the Company's common stock, which will vest in equal yearly installments over a three year period, provided Dr. Pan remains employed with the Company. The options have an exercise price of \$3.50 per share.

# **Director Compensation**

Our directors are reimbursed for reasonable out-of-pocket expenses incurred in attending meetings of the board of directors and committee meetings. In addition, each of our non-employee directors receives compensation for participating on our board of directors.

The following table sets forth all compensation paid or to be paid by the Company for each of the non-employee directors for the fiscal year ended December 31, 2012.

	Fees Earned			
	or		All Other	
	Paid in Cash	Stock	Compensation	
Name	(\$)	Awards	(\$)	Total (\$)
Elliot Maza (1)	30,000			30,000
Kang Sun (1)	20,000			30,000
Zhimin Cao	9,550			9,550
Yijin Li (2)	9,550			