

SMARTHEAT INC.  
Form 10-K  
April 02, 2012

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

\_\_\_\_\_  
FORM 10-K  
\_\_\_\_\_

(Mark One)

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

For the fiscal year ended December 31, 2011

OR

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 001-34246

SMARTHEAT INC.  
(Exact name of registrant as specified in its charter)

Nevada  
(State or other jurisdiction of  
incorporation or organization)

98 -0514768  
(I.R.S. Employer  
Identification No.)

A-1, 10, Street 7  
Shenyang Economic and Technological Development Zone  
Shenyang, China 110141  
(Address of principal executive offices)

Registrant's telephone number, including area code:  
+86 (24) 2519-7699

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

Title of Each Class:  
Common Stock, par value \$0.001 per share

Name of Each Exchange on Which Registered:  
NASDAQ Global Select Market

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.  
Yes  No

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, as amended ("Exchange Act") 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  No

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

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Table of Contents

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	Accelerated filer	Non-accelerated filer	Smaller reporting company
		(Do not check if a smaller reporting company)	

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).  
Yes No

The aggregate market value of voting common stock held by non-affiliates computed by reference to the price at which the common stock was last sold on June 30, 2011, was \$31,719,316. Accordingly, effective as of June 30, 2011, the registrant's aggregate market value was less than \$50 million and the registrant qualifies for "smaller reporting company" status under Rule 12b-2 of the Exchange Act and is subject to the disclosure requirements and filing deadlines for smaller reporting companies.

As of March 28, 2012, there were 3,955,774 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

None.

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Table of Contents

SMARTHEAT INC.

Table of Contents

		Page
PART I		
Item 1.	<u>Business</u>	1
Item 1A.	<u>Risk Factors</u>	11
Item 1B.	<u>Unresolved Staff Comments</u>	26
Item 2.	<u>Properties</u>	26
Item 3.	<u>Legal Proceedings</u>	26
Item 4.	<u>Mine Safety Disclosures</u>	26
PART II		
Item 5.	<u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	27
Item 6.	<u>Selected Financial Data</u>	28
Item 7.	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	28
Item 7A.	<u>Quantitative and Qualitative Disclosures about Market Risk</u>	39
Item 8.	<u>Financial Statements and Supplementary Data</u>	39
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	39
Item 9A.	<u>Controls and Procedures</u>	39
Item 9B.	<u>Other Information</u>	40
PART III		
Item 10.	<u>Directors, Executive Officers and Corporate Governance</u>	41
Item 11.	<u>Executive Compensation</u>	45
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	48
Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	51
Item 14.	<u>Principal Accounting Fees and Services</u>	51
PART IV		
Item 15.	<u>Exhibits, Financial Statement Schedules</u>	52
	<u>Financial Statements</u>	F-1

Table of Contents

NOTE ABOUT FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which include, but are not limited to, statements concerning our projected revenues, expenses, gross profit and income, mix of revenue, demand for our products, the benefits and potential applications for our products, the need for additional capital, our ability to obtain and successfully perform additional new contract awards and the related funding and profitability of such awards, the competitive nature of our business and markets and product qualification requirements of our customers. These forward-looking statements are based on our current expectations, estimates and projections about our industry, management's beliefs and certain assumptions made by us. Words such as "anticipates," "expects," "intends," "plans," "predicts," "potential," "believes," "seeks," "hopes," "estimates," "should," "may," "will," "with" variations of these words or similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors. Such factors include, but are not limited to the following:

- our goals and strategies;
- our expansion plans;
- our future business development, financial conditions and results of operations;
- the expected growth of the market for PHE products, heat meters and heat pumps in China;
  - our expectations regarding demand for our products;
- our expectations regarding keeping and strengthening our relationships with key customers;
  - our ability to stay abreast of market trends and technological advances;
- our ability to protect our intellectual property rights effectively and not infringe on the intellectual property rights of others;
  - our ability to attract and retain quality employees;
  - our ability to pursue strategic acquisitions and alliances;
    - competition in our industry in China;
- general economic and business conditions in the regions in which we sell our products;
  - relevant government policies and regulations relating to our industry; and
    - market acceptance of our products.

Additionally, this report contains statistical data that we obtained from various publicly available government publications and industry-specific third party reports. Statistical data in these publications also include projections based on a number of assumptions. The markets for PHEs, PHE Units, heat meters and heat pumps may not grow at the rates projected by market data, or at all. The failure of these markets to grow at the projected rates may have a material adverse effect on our business and the market price of our common stock. In addition, the changing nature of our customers' industries results in uncertainties in any projections or estimates relating to the growth prospects or future condition of our market. Furthermore, if any one or more of the assumptions underlying the market data is later found to be incorrect, actual results may differ from the projections based on these assumptions.

Unless otherwise indicated, information in this report concerning economic conditions and our industry is based on information from independent industry analysts and publications, as well as our estimates. Except where otherwise noted, our estimates are derived from publicly available information released by third party sources, as well as data from our internal research, and are based on such data and our knowledge of our industry, which we believe to be reasonable. None of the market data from independent industry publications cited in this report was prepared on our or our affiliates' behalf.

Additional information on the various risks and uncertainties potentially affecting our operating results are discussed in this report and other documents we file with the Securities and Exchange Commission, or the SEC, or upon written request to our corporate secretary at: A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110141. We undertake no obligation to revise or update publicly any forward-looking statements for any reason, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on these forward-looking statements.

As used in this report, “SmartHeat,” “Company,” “we,” “our” and similar terms refer to SmartHeat Inc. and its subsidiaries, unless the context indicates otherwise.

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Table of Contents

Our functional currency is the U.S. Dollar, or USD, while the functional currency of our subsidiaries in China are denominated in Chinese Yuan Renminbi, or RMB, the national currency of the People's Republic of China, which we refer to as the PRC or China, and the functional currency of our subsidiary in Germany is denominated in Euros, or EUR. The functional currencies of our foreign operations are translated into USD for balance sheet accounts using the current exchange rates in effect as of the balance sheet date and for revenue and expense accounts using the average exchange rate during the fiscal year. See Note 2 of the consolidated financial statements included herein.

Effective February 7, 2012, we implemented a one-for-ten reverse stock split of our common stock. Unless otherwise indicated, all share amounts and per share prices in this Annual Report on Form 10-K were retroactively adjusted to reflect the effect of this reverse stock split. See Note 21 of the consolidated financial statements included herein.

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Table of Contents

PART I

Item 1. Business

General

We are a designer, manufacturer and seller of clean technology plate heat exchangers and related systems marketed principally in the PRC. Our products are used in the industrial, residential and commercial markets to improve energy utilization and efficiencies, and to reduce pollution by reducing the need for coal-fired boilers. We design, manufacture, sell and service plate heat exchangers, or PHEs, PHE Units, which combine PHEs with various pumps, temperature sensors, valves and automated control systems in systems custom designed by our own in-house engineers, heat meters and heat pumps for use in commercial and residential buildings. We also design, manufacture and sell spiral heat exchangers and tube heat exchangers. Our products and systems are an increasingly important element in providing a clean technology, mission-critical solution to energy consumption and air pollution problems in China and are commonly used in a wide variety of industrial processes where heat transfer is required. Common applications include energy conversion for heating, ventilation and air conditioning, or HVAC, and industrial use in petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. We sell our products under our SmartHeat and Taiyu brand names and also sell PHEs under the Sondex brand name as an authorized dealer of Sondex PHEs in China.

Our History

We are a U.S. holding company with no material assets other than the ownership interests of our subsidiaries through which we design, manufacture and sell our clean technology PHEs and related systems. We were incorporated in the State of Nevada on August 4, 2006, under the name Pacific Goldrim Resources, Inc., as an exploration stage corporation with minimal operations to engage in the exploration for silver, lead and zinc. On April 14, 2008, we changed our name to SmartHeat Inc. and entered into a Share Exchange Agreement, or the Share Exchange Agreement, to acquire Shenyang Taiyu Machinery & Electronic Equipment Co., Ltd., subsequently renamed SmartHeat Taiyu (Shenyang) Energy Technology Co., Ltd., or Taiyu, a privately held Sino-foreign joint venture company formed under the laws of the PRC on July 24, 2002, and engaged in the design, manufacture, sale and servicing of plate heat exchange products in China. The Share Exchange Agreement was entered into by SmartHeat, Taiyu and the shareholders of Taiyu. At the closing of the Share Exchange Agreement, all of the equitable and legal rights, title and interests in and to Taiyu's share capital of Yuan 25,000,000 were exchanged for 1,850,000 shares of SmartHeat common stock, or the Share Exchange. We received PRC government approval on May 28, 2008, of our subscription for 71.6% of the registered capital of Taiyu, and approval on June 3, 2009, of the transfer of the remaining 28.4% ownership of Taiyu from the original joint venture shareholders who had received shares of our common stock in the Share Exchange. As a result of the Share Exchange and subsequent transactions contemplated by the Share Exchange Agreement, and receipt of the above PRC government approvals, Taiyu became our wholly foreign-owned enterprise, or WFOE.

Prior to our acquisition of Taiyu, we had no interest in any property, but had the right to conduct exploration activities on 13 mineral title cells covering 27,027 hectares (66,785 acres) in the Slocan Mining Division of southeastern British Columbia, Canada. In connection with the acquisition of Taiyu, we transferred all of our pre-closing assets and liabilities (other than the obligation to pay a \$10,000 fee to our audit firm) to a wholly owned subsidiary, PGR Holdings, Inc., a Nevada corporation, or SplitCo, under the terms of an Agreement of Conveyance, Transfer and Assignment of Assets and Assumption of Obligations dated April 14, 2008. We sold all of the outstanding capital stock of SplitCo to Jason Schlombs, our former director and officer and one of our major shareholders, pursuant to a Stock Purchase Agreement dated April 14, 2008, in exchange for the return of his 250,000 shares of our common stock to us for cancellation.



As an expansion of our business following our acquisition of Taiyu, we acquired and established strategic subsidiaries in China and Germany. On September 25, 2008, we acquired SanDeKe Co., Ltd., or SanDeKe, a Shanghai-based manufacturer of PHEs. On June 16, 2009, we completed an asset purchase transaction with Siping Beifang Heat Exchanger Manufacture Co., Ltd., or Siping Beifang, to set up a new manufacturing facility under our newly incorporated subsidiary, SmartHeat Siping Beifang Energy Technology Co., Ltd., or SmartHeat Siping. On August 14, 2009, we formed Beijing SmartHeat Jinhui Energy Technology Co., Ltd., or Jinhui, a joint venture in Beijing of which we own 52%, to provide consulting services and expand our sales of PHEs into new industries and regions of China. On April 7, 2010, we formed SmartHeat (China) Investment Co., Ltd., or SmartHeat Investment, as an investment holding company in Shenyang for our investment in and establishment of new companies and businesses in China. On April 12, 2010, SmartHeat Investment formed SmartHeat (Shenyang) Energy Equipment Co., Ltd., or SmartHeat Energy, as its wholly owned subsidiary for the research, development, manufacturing and sales of energy products. On May 6, 2010, we formed SmartHeat (Shanghai) Trading Co., Ltd., or SmartHeat Trading, through a nominee, Cleantech Holdings Inc., a British Virgin Islands company, or Cleantech Holdings, to market and expand sales of our branded products in China. Effective as of November 9, 2011, we terminated the nominee-owner relationship and acquired direct control over SmartHeat Trading. On December 2, 2010, we formed Hohhot Ruicheng Technology Co., Ltd., or Ruicheng, a joint venture in Hohhot City, China, for the design and manufacture of heat meters, of which we acquired 51% of the equity interest on January 7, 2011. On March 1, 2011, we entered into a purchase agreement to acquire 95% of the equity interests in Shenyang Bingchuan Refrigerating Machine Limited Company, a Shenyang-based state-owned heat pump manufacturer and designer subsequently renamed SmartHeat (Shenyang) Heat Pump Technology Co., Ltd., or SmartHeat Pump. On March 3, 2011, we completed the acquisition of Gustrower Wärmepumpen GmbH, subsequently renamed SmartHeat Deutschland GmbH, or SmartHeat Germany, a designer and manufacturer of high efficiency heat pumps in Germany, to extend our clean technology heating solutions into the rapidly growing heat pump markets in Europe and China.

Table of Contents

Our corporate structure as of the date of this report is set forth in the following diagram. Taiyu, SanDeKe, SmartHeat Siping and SmartHeat Investment are our WFOEs authorized by their respective business licenses to operate our businesses in China. SmartHeat Germany is our wholly owned subsidiary in Germany. We own 52% and 51%, respectively, of the equity interests in our PRC-based joint venture companies, Jinhui and Ruicheng. SmartHeat Energy is a wholly owned subsidiary of SmartHeat Investment. Taiyu owns 95% of the equity interests of SmartHeat Pump. Prior to November 9, 2011, we had no direct ownership interest in SmartHeat Trading; instead, we controlled and were entitled to 100% of the profit or loss of SmartHeat Trading under contractual arrangements. Effective as of November 9, 2011, we terminated the nominee-owner relationship and acquired direct control over SmartHeat Trading.

## Table of Contents

- (1) Effective as of November 9, 2011, we terminated the contractual arrangements by which we controlled and were entitled to 100% of the profit or loss of SmartHeat Trading and acquired direct control over the entity.
- (2) Taiyu holds 95% of the equity interest in SmartHeat Pump, with the remaining 5% of the equity interest held by Shenyang Economic and Technological Development Zone State-owned Assets Management Co., Ltd.
- (3) We control 52% of Jinhui pursuant to a joint venture agreement entered into with the minority owner, Beijing Jun Tai Heng Rui Investment Consulting Co. Ltd.
- (4) We control 51% of Ruicheng pursuant to a joint venture agreement entered into with the minority owners, Hohhot Chengfa Heating Co. Ltd. and Beijing Taiyu Huineng Machinery and Electronic Equipment Co. Ltd.

Our principal offices are located at A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110141. Our telephone number is +86 (24) 2519-7699. Our website is [www.smartheatinc.com](http://www.smartheatinc.com). Copies of our annual, quarterly and current reports and any amendments thereto filed with or furnished to the SEC are available free of charge through our website as soon as reasonably practicable after such reports are available on the SEC website at [www.sec.gov](http://www.sec.gov). Furthermore, a copy of this Annual Report is located at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. We make available free of charge on our website our Code of Conduct and the charters of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee.

## Our Products

We design, manufacture, sell and service clean technology heat transfer products and systems including PHEs, PHE Units, heat meters and heat pumps. Our products are an increasingly important element in providing a clean technology, mission-critical solution to energy consumption and air pollution problems in China. Our products are used in the industrial, residential and commercial markets to improve energy utilization and efficiencies, and to reduce pollution by reducing the need for coal-fired boilers.

## PHEs

A PHE is a device that transfers energy, usually in the form of heat, from one fluid to another across a solid surface. PHEs consist of a set of plates made of stainless steel, titanium and nickel alloy that are sealed by gaskets and then bolted together in a large metal frame. Plates come in a variety of sizes and wave patterns, and have large heat transfer surfaces and have high thermal conductivity. The quantity and size of the plates used, along with the total size of the PHE, vary according to particular application requirements. Among the primary advantages of PHEs compared to traditional shell-and-tube heat exchangers are their efficiency, compact design and ease of customization. PHEs have larger heat transfer surface areas than traditional heat exchangers, resulting in greater thermal conductivity and higher heat transfer coefficient. As a result, despite its smaller size, a PHE can transfer the same amount of heat as a traditional shell-and-tube heat exchanger. Furthermore, PHEs can be installed as replacements for traditional heat exchangers in existing installations. because of their compact design in addition in new buildings and facilities.

Heat exchangers were invented in the mid-1920's to control pressure and temperature during industrial production. Later innovations in heat transfer technology, including the development of PHEs, led to higher heat recovery rates, lower fuel consumption and reduced related pollution. In a PHE, steam, hot water or other heated fluid from an industrial process flows into the PHE from one location and cool fluid flows in from another source. As the hot and cold fluids move in opposite directions through the PHE, the hot fluid cools as it transfers heat to the cool fluid, which

absorbs the heat and gets warmer. In addition to more efficient heat transfer, PHEs offer a more compact design, ease of maintenance and the ability to adjust performance simply by adding or removing plates. This flexibility makes PHEs a preferred solution and translates into lower expenditures on installation and equipment purchases.

We currently focus on the Chinese market. In addition to manufacturing our own PHEs, we import finished stainless steel plates from Sondex and assemble customized PHEs and PHE Units based on our clients' specifications. All designs of our PHEs and PHE Units are done in-house by our engineers utilizing advanced software and our proprietary in-house CAD software. Through our acquisition of Siping Beifang, we manufacture our own plates, tubes and gaskets and design and manufacture PHEs and PHE Units using component plates sourced from our own vertically integrated supply chain or from our main supplier of component plates, Sondex. Our plates provide solutions for a market segment with strong demand for PHE products that are priced 10%-15% lower than PHE products manufactured with Sondex plates. PHEs accounted for 50% and 48% of our sales in 2011 and 2010, respectively.

Table of Contents

PHE Units

We began designing, manufacturing and selling our PHE Units in May 2003. PHE Units integrate PHEs with various pumps, temperature sensors, valves and automated control systems to form a “unit.” While our PHE Units are used in a variety of industrial processes, we have developed an expertise in designing and integrating PHE Units for HVAC systems in residential and commercial buildings. Often our PHE Units are used along with other units to form a “PHE network” installed in a local district heating system. The production and sale of PHE Units have been central to our historical growth. PHE Units require a comparatively higher level of technical skill and knowledge of the applications in which they are used. As a result, PHE Units are generally sold at a higher selling price. Our PHE Units are designed in-house by our system engineers employing customized CAD software. We believe we have emerged as a leading domestic producer of PHE Units, with an estimated market share in China of 10% in 2011. PHE Units accounted for 36% and 44% of our sales in 2011 and 2010, respectively.

Heat Meters

While heating companies in many Western countries have long used meters to measure customer heat usage and invoice customers, residents and commercial customers in China typically are billed based on the square footage of utilized space. Heat meters provide heat consumption information to users and measure the volume of heat used in commercial and residential facilities. As an important revenue gauge for utilities, the calibration of meters in many countries is regulated by government agencies and subject to local or national guidelines. In response to rising energy costs and the increased sensitivity to environmental issues, the PRC government and local utility companies made the use of heat meters compulsory in China. As of July 2003, heat meters were required nationally by law for new construction installed with central heating, and the requirement was extended in April 2008 by the Energy Conservation Law, Article 38, to cover existing buildings being retrofitted.

Using our established relationships with provincial governments and utility companies throughout China, we introduced our patented heat meters to the market during the second quarter of 2006. We continue to work with national and local government entities to establish a national heating standard in China and become an active leader in China’s heat meter market. Sales to date have been small relative to our PHE and PHE Unit product lines but have been growing steadily. Heat meters accounted for 10% and 8% of our sales in 2011 and 2010, respectively. We believe there are significant opportunities for strong incremental growth as the PRC government continues to focus on ways to monitor and conserve energy cost effectively.

Heat Pumps

Heat pump systems provide heating, cooling and hot water for residential and commercial buildings and process heat for industrial applications by moving heat between two locations using small amounts of electricity. In a typical system, heat pumps draw heat from outside air or ground to warm the inside of a home or office building. Many heat pumps have reversible cycles, too, using the same system to cool the inside of a building by transferring heat outside. Heat pumps replace conventional energy sources such as oil, gas and coal with the solar energy stored in water, soil and air or heat recovered from wastewater or exhaust air. By transferring heat between locations, rather than burning fuel to create a heat source, heat pumps are extremely efficient energy transfer systems. Commercial users install heat pump systems not only to reduce energy consumption but also carbon dioxide, or CO<sub>2</sub>, emissions, a trend that is encouraged by policymakers in China. The advantages of heat pumps in terms of energy efficiency, operating cost, CO<sub>2</sub> emission reduction and their ability to provide heating and cooling in one machine has made them the leading energy source for new buildings in Germany and Austria, and has replaced conventional fossil fuel based technology in these countries to a large degree. As the PRC government continues to focus on emissions reduction and energy conservation, we believe there are significant opportunities for strong incremental growth in the rapidly growing heat pump market in China. We also anticipate expanding sales of our heat pumps manufactured in China under EU design standards to the European market. Our heat pump products incorporate our two decades of heat pump development experience with advanced technology acquired with our acquisitions of SmartHeat Pump and SmartHeat Germany in 2011. Heat pumps accounted for 4% of our sales in 2011, our first year selling heat pumps.

Heat Pump

## Table of Contents

### Our Industry

Heat transfer technology was introduced to China in the 1960's from Russia, mainly for applications in the petroleum industry. Today, heat exchangers are used in a wide range of industrial processes, including energy, such as conventional and nuclear power plants, HVAC, petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. Heat transfer equipment also is employed in new energy applications such as wind, solar, biomass and waste disposal. We serve the utility and industrial sectors throughout China, selling our PHEs, PHE Units and related accessories principally to the petrochemical, power plant, HVAC, chemical and metallurgy industries. We sell our heat meters and heat pumps principally to participants in HVAC sector. We also offer after-sales services, including maintenance, repair and supplying spare parts, on all our products.

China has become one of the largest and fastest growing markets for heat exchangers. The industry market size for heat exchangers in China was estimated at approximately \$7.9 billion in 2010, according to the China Research & Intelligence "Research Report on Chinese Heat Exchanger Industry – 2011-2012," or the CRI Report. As the PRC government continues its stimulus plans for clean energy policies, the CRI Report estimates that the heat exchanger market in China will continue to grow, reaching approximately \$14 billion in 2015. Currently, there are social, economic, environmental and regulatory factors driving demand for environmentally friendly solutions, which reduce pollution and advance energy efficiency, many of which utilize PHEs. These include:

**Environmental Conditions in China.** According to the report entitled "The Cost of Pollution in China," published in 2007 by the World Bank, the combined health and non-health cost of air and water pollution in China amounts to an estimated \$100 billion a year. Moreover, the report found that air pollution in China, especially in large cities, is leading to higher incidences of lung diseases, cancer, and respiratory problems. According to a report commissioned by the Energy Foundation published in 2008, these problems are directly attributable to the fact that 80% of China's carbon dioxide emissions come from burning coal.

**Growing Demand for Heating Water.** China provides heating water to households in most of its northern provinces from centralized heating systems. As cities grow in these provinces along with the emerging middle class, so does the demand to expand this supply into new cities, industrial parks and other provinces. Heating water in China is generated by local power plants that pump emitted hot water through a closed loop system to sub-stations, which then pump the water through a network of pipes to households up to 50 kilometers from the local station. These systems of heating stations and sub-stations utilize numerous PHEs and PHE Units for the dual purpose of providing cooling systems for power plants and heat sources for residents and factories.

**Heightened Environmental Awareness.** The PRC government's 12th Five-Year Plan continues to address environmental concerns and emphasize clean energy sources as part of the process towards ensuring sustainable growth in China. The Plan maintains long-term plans to cut CO<sub>2</sub> output per unit of Gross Domestic Product, or GDP, by at least 40% by 2020 from 2005 levels. Furthermore, the Plan sets forth clear energy and CO<sub>2</sub> emissions targets to help ensure energy policies are implemented with defined carbon goals. The implementation of PHEs and PHE Units in new construction facilities, and as replacements for legacy shell-and-tube heat exchangers, can help meet these goals because of the increased energy efficiency of these products.

**Urbanization.** According to a 2011 national sample survey conducted by the National Bureau of Statistics of China, over 51% of China's population lived in urban settings in 2011. Additionally, according to the National Bureau of Statistics of China, 15 cities near and around our sales and service centers have a population of more than five million. Eight of these cities are among the world's fastest growing, increasing at an estimated annual rate of 2.3% or more according to the CIA World Factbook. China's urbanization has led to new infrastructure development and existing infrastructure improvements that require ongoing investment in heating solutions.

Emerging Wealth. The rapidly expanding middle class in China demands access to quality heating during the winter months. This demand is often met by using hot water supplied from a power station and district heating network that utilizes a system of PHEs and PHE Units.

#### Our Competitive Strengths

The market for heat transfer products and systems in China is highly competitive, with multiple overseas and domestic producers and no established leader in the fragmented and diverse end markets. We believe we have the following competitive strengths:

5

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## Table of Contents

**Provider of Key Elements Used to Improve Energy Efficiencies and Reduce Coal Pollution.** We offer a full line of PHEs, PHE Units, heat meters and heat pumps. The primary advantages of plate heat exchanger technology, compared to traditional shell-and-tube heat exchanger technology, are efficiency, compact design and ease of customization. PHEs have larger heat transfer surface areas and therefore also have greater thermal conductivity. As a result, PHEs can transfer the same amount of heat as a traditional shell-and-tube heat exchanger, but with the benefit of a smaller size unit.

**Established Brand Names in the Growing China Heating Industry.** We have established SmartHeat and Taiyu as leading brand names in the fragmented PRC heating industry and seek to utilize this awareness to become the leading domestic supplier of PHEs, PHE Units and related products in the rapidly growing PRC market. We believe our brand names are recognized for their quality and efficiency, which we believe we can leverage to improve our reputation for high quality PHE Units in China.

**Quality Engineering, Research and Development.** We emphasize efficiency, durability and quality engineering in all of our products. All of our products utilize the latest technologies, and our designs are created using advanced software systems. We have 13 registered patents in China for PHE-related products and heat meters. To maintain our competitive edge in the marketplace and keep pace with new technologies, we fund research and development on an ongoing basis to find improved efficiencies in design, cost and energy capture. Research and development costs for 2011 and 2010 were \$1.80 million and \$1.89 million, respectively. We plan to continue to invest in research and development to identify new industry applications for PHEs, improve and expand our product lines, develop multifunctional PHE Units and modify PHE designs to meet current market demand.

**Strong Technical Support.** The selection of PHEs and PHE Units requires technical knowledge regarding the operating temperature, pressure, corrosivity, viscosity and purity of the fluid used as well as the pressure loss within the system. Our unique design software enables us to provide high quality and timely technical support to ensure our customers receive the right equipment for each project. We also provide a streamlined and error-free installation process to minimize project complications.

**Enterprise-Wide Design, Production and Control Systems for Efficient Pricing and Streamlined Manufacturing.** Our technologically advanced CAD systems are integrated with our real-time enterprise resource planning, or ERP, and finance systems. This advanced, integrated platform allows our field salespeople to input orders, obtain draft models, access quotes and confirm delivery dates within minutes. The platform also enables inventory and production personnel to accurately schedule and reduce lead production times to five days for PHEs and ten days for PHE Units. We believe these lead times are some of the best in the industry and provide an unparalleled level of customer service.

**Focus on Quality.** We have a PRC National Safety Certification for our PHE products, and are an ISO 9001 and ISO 14001 certified manufacturer, which together recognize our development and implementation of procedures that demonstrate our ability to consistently manufacture products meeting customer specifications, environmental standards and applicable statutory and regulatory requirements.

**First-Rate Customer Service and Reliable Product Delivery.** We believe that our employees provide first-rate customer service, technical expertise and product knowledge to streamline the selection, design and installation processes. We provide after-sales service principally through our local service centers and deliver products on time to meet tight project deadlines. Our focus on delivering premium service separates us from our competitors and has been critical in helping us win a number of projects for various multinational companies and local governments.

**Diversified End Markets and Customers.** Our PHEs and PHE Units are broadly used across a variety of industrial end markets including the energy, such as conventional and nuclear power plants, HVAC, petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. We also benefit from a diverse customer

mix, with no individual customer accounting for greater than 10% of sales in 2011 or 2010. This diversification of end markets and customer base helps to insulate us from sales volatility that would occur if we concentrated in specific industries. The majority of our customers are state-owned utilities, engineering and construction companies and industrial companies.

**Experienced Management Team.** Our senior management team has extensive business and industry experience. Jun Wang, our Chairman, President and Chief Executive Officer, was the founder of Taiyu in 2002. He was a sales manager for Honeywell International Inc. from 1996 to 1999 and a sales manager for Alfa Laval from 1994 to 1996. Mr. Wang obtained his master's degree in Engineering from Tsinghua University in 1989. Zhijuan Guo, our Chief Financial Officer, has over 15 years of finance and accounting experience and has been with us since inception in 2002. Xudong Wang, our Vice President of Strategy and Development, served previously as the vice president of an international financial firm. Wen Sha, our Vice President of Marketing, has extensive sales experience and industry contacts. Prior to joining us as a regional sales manager in 2005, he served as the general manager of Nanjing Hui Dun Ltd. and as sales director of APV Accessen in Shanghai, a leading international PHE firm. Feng Chen, Ph.D., our Chief Technology Officer, joined us in 2008 as part of our SanDeKe acquisition. Prior to founding SanDeKe, he served in a leading engineering position in China with Alfa Laval.

## Table of Contents

### Our Growth Strategy

Our goal is to market our strong brands to expand into new distribution channels in China, further penetrating the many market segments throughout China for our PHEs, PHE Units and related accessories, and expand sales of our heat pumps in both China and Europe.

**Continue Organic Growth Initiatives.** We believe that the current PHE and related systems markets in China are fragmented and represent excellent opportunities for us to gain additional market share from our competitors. We expanded our business and product lines in recent years through strategic acquisitions and establishment of subsidiaries, including the acquisitions of SanDeKe, Siping Beifang, SmartHeat Pump and SmartHeat Germany. Each acquisition and new subsidiary has accelerated our strategic plan by: (i) adding manufacturing capacity; (ii) broadening our product offerings to include multiple heat exchange systems; (iii) facilitating access into new geographic regions throughout China; (iv) improving our cost structure; (v) enhancing our engineering capabilities; and (vi) helping us enter new and higher growth end markets both in China and Europe. We intend to continue to market our strong brands to expand into new distribution channels, improve the quality of our products through our engineering capabilities and leverage our quality customer service and reliable product delivery to gain incremental business with our existing clients. Finally, we believe that, as we continue to grow, economies of scale and improved cost control measures will drive stronger profitability across all our product lines.

**Pursue High Growth End Markets in China.** We target our sales efforts on a number of high growth end markets in China, such as the nuclear power, petrochemical and shipbuilding industries. We currently have a presence in these segments but believe there are significant opportunities to improve our market share by leveraging our premium product quality and high quality service. Our solutions are commonly used in many of these industries and customers continue to assess the cost savings and positive environmental attributes of PHEs.

**Promote Heat Meters.** In response to rising energy costs and an increased focus on energy efficiency, the PRC government and local utility companies made the use of heat meters compulsory in China. In July 2003, heat meters were required nationally by law for new buildings installed with central heating; this requirement was extended in April 2008 by the Energy Conservation Law, Article 38, to cover existing buildings being retrofitted. We continue to work with the General Administration of Quality Supervision and Quarantine, an administrative organ established under the PRC's State Council, to establish national heating standards in China. We also intend to leverage our brand names and our reputation in the PHE market to gain market share.

**Expand Heat Pump Sales.** We began manufacturing and selling heat pumps in 2011 using the proven advanced technology developed by SmartHeat Pump and SmartHeat Germany. Heat pump systems are a rapidly growing market in China and the leading energy source for new buildings in Germany and Austria. Heat pumps have replaced conventional fossil fuel based technology to a large degree in these European countries for heating, cooling and hot water for residential and commercial buildings. As the PRC government continues to focus on emissions reduction and energy conservation, we believe there are significant opportunities for strong incremental growth in the residential and commercial markets in China. We also anticipate expanding sales of our heat pumps manufactured in China under EU design standards to the European market.

### Production

We currently operate five manufacturing facilities in China, including our Taiyu plant in Shenyang, which is our principal manufacturing facility, and our SanDeKe, Siping Beifang, Ruicheng and SmartHeat Pump plants, and one manufacturing facility for heat pumps in Germany. Our manufacturing facilities, in the aggregate, currently have the capacity to produce approximately 650 PHEs, 240 PHE Units, 9,000 heat meters and 350 heat pumps monthly. Our operations in China generally operate on an 8-hour shift, with the exception of the high season from May to

November, during which we may operate for 11-12 hours per day. Production is driven by orders from clients and typically is scheduled on a just-in-time delivery basis.

#### Marketing

Since initiating operations, we have emphasized the development of the SmartHeat and Taiyu brands in China, which are recognized and associated with quality production and first-rate service. We have long-standing positive relationships with local governments in Beijing, Shenyang, Urumqi, Shandong, Jiangsu and Shanghai, and formed new relationships with local governments in Yingkou, Qingdao, Jiamusi and Harbin. We regularly appear at industry trade shows, attending HVAC trade fairs in Shanghai and environmental protection forums in China. We also maintain positive relationships with local utilities, oil refiners, steel producers and food and beverage companies. Marketing costs generally are funded through working capital and expensed as incurred. Following our acquisition of SmartHeat Germany in 2011, we intend to expand sales of heat pumps under the SmartHeat brand name to Europe through original equipment manufacturers and third-party installers.

## Table of Contents

### Suppliers

Plates and components together constituted approximately 80% of our raw material purchases in 2011. Plates for our PHEs and PHE Units are manufactured in our facilities and also are purchased from Sondex under the terms of our Sondex authorized dealer arrangement. While we are an authorized dealer of Sondex products, annual or quarterly purchasing prices are not fixed and fluctuate according to Sondex's most recent pricing list. We generally order stainless steel plates two to three months in advance based on production needs and projected sales. Sondex plate purchases accounted for approximately 10% of our total annual raw material purchases in 2011.

Components generally include pumps, valves, pipes and electronic meters purchased from a number of premium international and domestic suppliers who have been certified to meet our quality specifications. Representative component suppliers include Siemens, Wilo A.G. and Honeywell, as well as others. Components are ordered on an as needed basis for manufacturing. We typically maintain a relatively small inventory of component parts for resale.

### Customers

We sell both directly through our sales force and through a network of national distributors located throughout China. All of our work is performed based on written contracts with customers and there are no oral contracts. Our customer base consists primarily of state-owned enterprises diversified across a number of end markets in China, such as real estate development, with no individual customer accounting for greater than 10% of our sales in 2011 or 2010.

### Intellectual Property

We use the SmartHeat and Taiyu brand names on our products in China and the SmartHeat brand on our heat pumps in Europe. We have registered trademarks for our brand names with the China Trademark Bureau, which expire in 2020. We believe our brand names are recognized in China's heating industry for quality and efficiency. In addition, we have registered and maintain numerous internet domain names related to our business, including "smartheatinc.com." Collectively, the trademarks and domain names that we and our subsidiaries hold are of material importance to us. We have 13 registered patents in China related to our products, of which 5 expire in 2014, 1 in 2016, 2 in 2017 and 5 in 2021. We intend to apply for additional patents in China to protect our core product designs.

### Research and Development

To maintain our competitive edge in the marketplace and keep pace with new technologies, we believe it is important to devote resources to ongoing research and development to find improved efficiencies in design, cost and energy capture. Research and development costs for 2011 and 2010 were \$1.80 million and \$1.89 million, respectively. We plan to continue to invest in research and development to identify new industry applications for PHEs, improve and expand our product lines, develop multifunctional PHE Units and modify PHE designs to meet current market demand.

### Competition

We compete principally in the domestic China market. We believe our competitive advantages lie in superior engineering and design skills, the longevity and efficiency of the components we use, our ability to vertically integrate our manufacturing process, our just-in-time delivery and the reliable after-sales services we provide through our local service centers. We also believe our position as a PRC-based producer of PHEs and PHE Units in a marketplace previously dominated by foreign manufacturers creates an advantage when seeking new customers. We receive contracts for our products through bidding processes and negotiations directly with customers.

Our principal competitors in the domestic China market for PHEs include Alfa Laval, APV, Tranter, Accessen, Lanshi and Juyuan, and foreign producers hold an approximately 50% market share. We believe the quality of our PHEs is equal to those sold by Alfa Laval, as are our prices. In comparison with other domestic producers, our prices for PHEs are approximately 10%-15% higher, reflecting a premium we believe attributable to the quality of our products.

We believe we have emerged as a leading domestic producer of PHE Units, with an estimated market share in China of 10% in 2011. Our principal competitors in the domestic China market for PHE Units, each estimated to have less than a 5% market share, are: Danfoss, Accessen, a Sino-U.S. joint venture established by Denmark's Accessen and utilizing Alfa Laval plates along with their own plates in the PHE Units, and Juyuan. We believe that Danfoss competes directly with us for contracts with the local heat and power companies in larger cities, while Accessen targets the petrochemical, metallurgy and HVAC sectors.

The market for heat meters is extremely fragmented with multiple overseas and domestic producers and no established leader. We continue to seek to become a leading supplier of heat meters in China.

## Table of Contents

We expanded into the heat pump market in China and Europe with our acquisitions of SmartHeat Pump and SmartHeat Germany in 2011. The markets for heat pumps in these markets are highly fragmented. We intend to focus on the middle high-end market for heat pumps in China, competing on price and customization capabilities with foreign and joint venture producers by leveraging our domestic manufacturing and engineering skills and advanced technology from SmartHeat Germany.

### Seasonality

We typically experience stronger sales in the third and fourth calendar quarters, which is the start of fall and winter in China. Our quarterly revenues may fluctuate significantly due to the seasonal nature of central heating services in China, where the equipment used in residential buildings must be delivered and installed prior to the beginning of the heating season in late fall. We believe that as we expand our presence into other industries and sectors, this seasonality will be partially mitigated.

### Governmental and Environmental Regulation

#### Product and Business Regulations

Our business and company registrations are in compliance in all material respects with the laws and regulations of their respective governing municipal and provincial authorities. Our subsidiaries and manufacturing facilities in China are subject to the national and local laws of the PRC. Other than as described following for our product lines, we are not subject to any other government regulations that would require us to obtain a special license or approval from the PRC government to operate our business or manufacturing facilities in China.

Our PHEs and PHE Units are not subject to material regulation by the PRC government or other national agencies. We obtained PRC National Safety Certification for our PHE products and are an ISO 9001 quality management certified manufacturer, which together recognize our commitment to safety and quality in our manufacturing processes. Although not required for the production and sale of PHE products in China, the PRC National Safety Certification is of critical importance in choosing a PHE provider for companies in industries utilizing high temperatures or pressure in their production processes.

Our manufacture and sale of heat meters and heat pumps in China require licenses issued by the PRC government, which we received in 2005 and 2008, respectively, and continue to maintain through renewals. The Safety Bureau overseeing heat meter and heat pump production conducts site visits and inspections of documents on a periodic basis to verify adherence to PRC manufacturing standards. Additionally, due to rising energy costs and the increased sensitivity to environmental issues, PRC government and local utility companies have made the use of heat meters compulsory in China. As of July 2003, heat meters were required nationally by law for new construction installed with central heating and. In April 2008, the Energy Conservation Law, Article 38, extended the requirement to cover retrofitted buildings. We are not required to maintain any license for the manufacture and sale of heat pumps in Germany. The European Commission has promulgated standards, such as EN 378 Safety and Environmental Requirements, for heat pumps and products sold in the European Union must carry CE marking, indicating conformity with such requirements. We believe that our heat pumps sold in Europe comply with all currently applicable standards.

#### Environmental Regulations

Our manufacturing facilities in China are subject to the national environmental regulations of the PRC as well as local laws regarding pollutant discharge, air, water and noise pollution, including the Environmental Protection Law of the PRC, the Environmental Impact Appraisal Law of the PRC, the Law of the PRC on the Prevention and Control of

Water Pollution, the Law of the PRC on Prevention and Control of Environmental Pollution Caused by Solid Waste, the Law of the PRC on Prevention and Control of Air Pollution and the Law of the PRC on Prevention and Control of Environmental Noise Pollution. The Environmental Protection Law of the PRC sets out the legal framework for environmental protection in the PRC. The Ministry of Environmental Protection of the PRC, or the MEP, is primarily responsible for the supervision and administration of environmental protection work nationwide and formulating national waste discharge limits and standards. Local environmental protection authorities at the county level and above are responsible for environmental protection in their jurisdictions. Companies that discharge contaminants must report and register with the MEP or the relevant local environmental protection authorities. Companies discharging contaminants in excess of the discharge limits prescribed by the central or local authorities must pay discharge fees for the excess in accordance with applicable regulations and are also responsible for the treatment of the excessive discharge. Companies that directly or indirectly discharge industrial wastewater into the water or are required by law to obtain the pollutant discharge permit before discharging wastewater or sewage shall also obtain the pollutant discharge permit.



## Table of Contents

We have received PRC government certification of our operating facilities in China indicating that the business operations of our PRC subsidiaries are in material compliance with the relevant PRC environmental laws and regulations. We are an ISO 9001 quality management and ISO 14001 environmental management systems certified manufacturer, which together recognize our development and implementation of procedures that demonstrate our ability to consistently manufacture products meeting customer specifications, environmental standards and applicable statutory and regulatory requirements. Our production processes mainly generate noise, wastewater and solid wastes. We currently do not incur any material costs in connection with our compliance with the applicable PRC environmental laws as our manufacturing processes generate minimal discharge. Furthermore, the cost of maintaining compliance has not, and we believe, in the future, will not, have a material adverse effect on our business, consolidated results of operations and consolidated financial condition.

### Labor Protection Regulations

The Labor Contract Law of the PRC, effective on January 1, 2008, governs the establishment of employment relationships between employers and employees, and the conclusion, performance, termination of and the amendment to employment contracts. To establish an employment relationship, a written employment contract must be signed by the employer and employee. In the event that no written employment contract was signed at the time of establishment of an employment relationship, a written employment contract must be signed within one month after the date on which the employer first engaged the employee. The Labor Contract Law also imposes greater liabilities on employers and significantly affects the cost of an employer's decision to reduce its workforce. Further, it requires that certain terminations be based upon seniority and not merit. We believe that we are in material compliance with the requirements of this law.

On June 29, 2002, the Work Safety Law of the PRC was adopted by the Standing Committee of the 9th National People's Congress and came into effect on November 1, 2002, as amended on August 27, 2009. The Work Safety Law provides general work safety requirements for entities engaging in manufacturing and business activities within the PRC. We believe we are in material compliance with all applicable laws and regulations related to work safety.

### Foreign Currency Regulations

The principal regulations governing foreign currency exchange in China are the Foreign Exchange Administration Regulations promulgated by the State Council, as amended on August 5, 2008, or the Foreign Exchange Regulations. Under the Foreign Exchange Regulations, the RMB, the national currency of the PRC, is freely convertible for current account items, including the distribution of dividends, interest payments, trade and service-related foreign exchange transactions, but not for capital account items, such as direct investments, loans, repatriation of investments and investments in securities outside of China, unless the prior approval of the State Administration of Foreign Exchange, or the SAFE, is obtained and prior registration with the SAFE is made.

On October 21, 2005, the SAFE issued Circular 75, the Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Corporate Financing and Roundtrip Investment through Offshore Special Purpose Vehicles, which became effective as of November 1, 2005. Please refer to "Risk Factors – Risks Related to Business in China – PRC regulations relating to the registration requirements for PRC resident shareholders owning shares in offshore companies may subject our PRC resident shareholders to personal liability and limit our ability to acquire companies in China or to inject capital into our operating subsidiaries in China, limit our subsidiaries' ability to distribute profits to us or otherwise materially and adversely affect our business" for a discussion of Circular 75.

On August 29, 2008, the SAFE promulgated Circular 142, the Notice on Perfecting Practices Concerning Foreign Exchange Settlement Regarding the Capital Contribution by Foreign-invested Enterprises, regulating the conversion by a foreign-invested company of foreign currency into RMB by restricting how the converted RMB may be used.

Please refer to “Risk Factors – Risks Related to Business in China – Restrictions on currency exchange may limit our ability to receive and use our revenues effectively” for a discussion of Circular 142.

#### Dividend Distribution

Our ability to pay dividends may be affected by the complex currency and capital transfer regulations in China that restrict the payment of dividends to us by our PRC subsidiaries. PRC regulations currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. Our PRC subsidiaries also are required to set aside at least 10% of net income after taxes based on PRC accounting standards each year to statutory surplus reserves until the cumulative amount of such reserves reaches 50% of registered capital. These reserves are not distributable as cash dividends. Our PRC subsidiaries also may allocate a portion of their after-tax profits to their staff welfare and bonus funds, which may not be distributed to equity owners except in the event of liquidation. If any of our subsidiaries incur debt, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us.

## Table of Contents

### Employees

As of December 31, 2011, we had 811 full time employees and 73 seasonal employees in China and Germany. We maintain strong ties with our employees and staff and retention is stable. Our employee contracts in China adhere to both state and provincial employment regulations and all social security regulations. All compensation, including social insurance, is paid in a timely manner to authorities and employees. There have been no disputes to date and there are no collective bargaining agreements. Our sales personnel are eligible to receive annual bonuses based on pre-established sales targets. Production employees are also eligible for annual bonuses based on product quality ratios, customer complaint ratios, new product invention and product inventory.

### Item 1A. Risk Factors

Our business and an investment in our securities are subject to a variety of risks. The following risk factors describe the most significant events, facts or circumstances that could have a material adverse effect upon our business, financial condition, results of operations, ability to implement our business plan, and the market price for our securities. Many of these events are outside of our control. If any of these risks actually occurs, our business, financial condition or results of operation may be materially adversely affected. In such case, the trading price of our common stock could decline and investors in our common stock could lose all or part of their investment.

#### Risks Related to Our Business

The markets we serve are subject to seasonality and cyclical demand, which could harm our business and make it difficult to project long-term performance.

Demand for our products depends in part upon the level of capital and maintenance expenditures of our customers and end users. These expenditures historically have been cyclical in nature and vulnerable to economic downturns. Decreased capital and maintenance spending by our customers could have a material adverse effect on the demand for our products and our business, financial condition and results of operations. In particular, an economic slowdown in the domestic China economy may result in reduced orders for PHEs from the steel processing and petrochemical sectors and lower orders for PHE Units from the HVAC sector. In response to inflationary concerns, the PRC government instituted tightened fiscal policies in 2011 that contributed to a general slowdown in many sectors of China's economy and restricted bank lending practices. Accordingly, many state-owned enterprises in China, including real estate developers, encountered difficulties in 2011 in obtaining grants from the PRC government and faced an extended bank loan application process, both of which typically are used to finance the purchase of our products. If the PRC government continues its deflationary policies and efforts to stabilize economic growth in China, such disruptions may continue to adversely impact the capital needs of our customers, which, in turn, could adversely affect our results of operations, cash flows and financial condition. The historically cyclical nature of the demand for our products limits our ability to make accurate long-term predictions about our performance, however. Changing domestic and international economic and political conditions may also reduce the willingness of our customers and prospective customers to purchase our products and services.

Furthermore, sales of heat exchangers and related systems may fluctuate significantly due to the seasonal nature of central heating services in the PRC because the equipment used in residential buildings must be delivered and installed prior to the beginning of the heating season in late fall, which occurs during the third and fourth calendar quarters in China. To date, we have not been adversely affected by these seasonality trends and, given the current demand visibility, we do not currently foresee weakening in the demand for our products going forward in the next year. However, the seasonality of our business may result in significant operational challenges to our production and inventory control functions.

Our accounts receivables remain outstanding for a significant period of time, which has a negative impact on our cash flow and liquidity.

Our agreements with our customers generally provide that 30% of the purchase price is due upon the placement of an order, 30% upon delivery and 30% upon installation and acceptance of the equipment after customer testing. As a common practice in the heating manufacturing business in China, payment of the final 10% of the purchase price is due no later than the termination date of the standard warranty period, which ranges from 3 to 24 months from the acceptance date. We record revenue and corresponding accounts receivable when products are delivered to our customers, and for PHE Units, when customer acceptance occurs following delivery. Payments received prior to product delivery, or customer acceptance for PHE Units, are recorded as unearned revenue. We may experience payment delays from time to time, which historically have ranged from 1 to 3 months from the due date. While these payment delays are common in the heating manufacturing industry in China, such delays cause capital to be tied up in receivables, which may result in pressure on our cash flows and liquidity. In 2011, we had accounts receivable turnover of 1.38, with days sales outstanding of 264 and inventory turnover of 1.11. In 2010, we had accounts receivable turnover of 2.98, with days sales outstanding of 123 and inventory turnover of 4.26. The low accounts receivable turnover and high days outstanding in 2011 is due to an unexpected abandonment of projects, cancelation of orders and delays in the performance of PHE and PHE Unit contracts from certain state-owned customers due to the tightened fiscal policy in China during 2011. The low inventory turnover in 2011 compared to 2010 was due to increased raw materials inventory on hand for the readiness of the high production season during the second half of 2011 and increased finished goods inventory resulting from orders that have been delayed or canceled. While historically our collections have been reasonably assured, delays in collections and the significant period of time our accounts receivable remain outstanding may negatively impact our cash flow and liquidity

## Table of Contents

We acquire most of the components for the manufacture of our products from a limited number of suppliers, and if we are unable to obtain these components, we would experience manufacturing delays and our financial results could be adversely affected.

We acquire most of the components for the manufacture of our products from a limited number of suppliers. To manufacture our products, these components must be available when needed, at the right level of quality and at the right price. If we are unable to obtain these components accordingly, we would experience delays in manufacturing our products and our financial results could be adversely affected. Suppliers of some of these components require us to place orders with significant lead-time to assure supply in accordance with our requirements. Certain of these suppliers are currently the sole source of one or more components upon which we are dependent and alternative sources would not be available for those components unless we were to redesign our products. Other components could be obtained from alternate suppliers without redesign, but only at higher prices than we currently pay or for delivery later than required by our production schedule. We maintain a relatively small inventory of component parts for resale and our parts services business would suffer if the supply of replacement parts was reduced or terminated by our suppliers. If suppliers are not able to provide these critical components on the dates and at the prices scheduled, we may not be able to manufacture our products promptly and cost-effectively to meet customer orders, which could harm our credibility and the market acceptance and sales of our products.

We are a major purchaser of certain goods and raw materials that we use in the manufacturing process of our products, and price changes for the commodities we depend on may adversely affect our profitability.

Our profitability depends upon the margin between the cost to us of certain goods used in the manufacturing process, such as plates, pumps, water tanks, sensors, controlling systems and other raw materials, as well as our fabrication costs associated with converting such goods and raw materials compared to the selling price of our products, and the overall supply of raw materials. We have experienced and anticipate continued fluctuation in raw material costs as a result of world economic conditions, such as the price of stainless steel used to produce plates for our PHEs and PHE Units. We monitor the commodities markets for pricing trends and changes, but we do not engage in hedging transactions to protect against raw material fluctuations. Instead, we attempt to mitigate the short-term risks of price swings by purchasing raw materials in advance based on production needs and projected sales. It is our intention to base the selling prices of our products upon the associated raw materials costs to us, which normally account for approximately 80% of our cost of sales. However, we may not be able to pass all increases in raw material costs and ancillary acquisition costs associated with taking possession of the raw materials through to our customers. Although we are currently able to obtain adequate supplies of raw materials, it is impossible to predict future availability or cost. With the rapid growth of China's economy, the demand for certain raw materials is great while the supply may be more limited. This may affect our ability to secure the necessary raw materials in a cost-effective manner for production of our products at the volume of purchase orders that we anticipate receiving. The inability to offset price increases of raw materials by sufficient product price increases, and our inability to obtain raw materials, would have a material adverse effect on our consolidated financial condition, results of operations and cash flows.

We may experience material disruptions to our manufacturing operations in China that could result in material delays, quality control issues, increased costs and loss of business opportunities, which may negatively impact our sales and financial results.

We rely on our manufacturing facilities in China to operate our business and produce our products. While we seek to operate our facilities in compliance with applicable rules and regulations and take measures to minimize the risks of disruption at our facilities, a material disruption at one of our manufacturing facilities could prevent us from meeting customer demand, reduce our sales and negatively impact our financial results. Any of our manufacturing facilities, or any of our machines within an otherwise operational facility, could cease operations unexpectedly due to a number of events, including: prolonged power failures; equipment failures; disruptions in the transportation infrastructure

including roads, bridges, railroad tracks; fires, floods, earthquakes or other catastrophes; and other operational problems. Our future growth strategy includes an expansion of manufacturing capacity to meet anticipated demand for our existing and new products. Any projects undertaken by us to increase such capacity may not be constructed on the anticipated timetable or within budget. We may also experience quality control issues as we implement these manufacturing upgrades and ramp up production. Any such material disruption may prevent us from shipping our products on a timely basis, reduce our sales and market share and negatively impact our financial results.

We may not be able to obtain regulatory approvals for our products, which could result in a decrease in clients and revenue, unexpected expenses and loss of market share.

Some of our products are subject to PRC and international regulations related to the heating manufacturing industry. Manufacturers of heat meters and heat pumps in China require licenses issued by the PRC government to produce and sell these products in the domestic market. The Safety Bureau overseeing heat meter and heat pump production conducts site visits and inspections of documents on a periodic basis to verify adherence to the standards. PHEs and PHE Units are not subject to material regulation by the PRC government or other national agencies, but many purchasers of these products in industries utilizing high temperatures or pressure in the production process prefer to source from manufactures that have obtained a PRC National Safety Certification for their PHE products. The European Commission has promulgated standards, such as EN 378 Safety and Environmental Requirements, for heat pumps and products sold in the European Union must carry CE marking, indicating conformity with such requirements. As of December 31, 2011, we have no regulatory approvals pending for our products or that we need to obtain to conduct our business. We received our licenses to manufacture and sell heat meters and heat pumps in China in 2005 and 2008, respectively, which we continue to maintain through renewals. We seek to manufacture all products to customer specifications and we believe that our products meet all currently applicable national test standards. Any failure to manufacture and deliver products in compliance with all applicable standards and regulations for the markets in which our products are distributed may subject us to fines, penalties or business interruptions and could result in a decrease in clients or loss of market share. In addition, new or revised standards and regulations applicable to our products could require us to redesign existing and planned products, acquire new manufacturing equipment or incur other significant expenses. If we are not able to obtain regulatory approvals for our products based on the applicable standards and regulations, it could have material and adverse effects on our business, financial condition and prospects.

Table of Contents

We cannot be certain that our product innovations will continue or that our technology will continue to satisfy the changing needs of our customers, which could result in a decrease in clients and revenue, unexpected expenses and loss of market share.

We believe that our past performance has been based on, and our future success will depend, in part, upon our ability to continue to improve our existing products through product innovation and to develop, market and produce new products. We cannot assure you we will be successful in introducing, marketing and producing any new products or product innovations, or that we will develop and introduce in a timely manner innovations to our existing products which satisfy customer needs or achieve market acceptance. Our failure to develop new products and introduce them successfully and in a timely manner could harm our ability to grow our business and could have a material adverse effect on our business, results of operations and financial condition.

As with any technology, including the technology of our current and proposed products, there are risks that the technology may not successfully address all of our customers' needs. While we have already established successful relationships with our customers, their needs may change or vary. This may affect the ability of our present or proposed products to address all of our customers' ultimate technology needs in an economically feasible manner. Our success depends upon our ability to anticipate and respond in a timely manner to changes in the heating manufacturing industry. If we fail to identify and respond to these changes, our sales could decline and we could lose clients and market share, any of which could materially harm our business. Furthermore, if we are unable to continue to meet our clients' needs with our current product lines, we may be required to redesign existing and planned products, acquire new manufacturing equipment or incur other significant expenses.

Our relationship with Sondex has substantially contributed to our business and its growth, and if this relationship were to terminate, our business and operations could be adversely impacted.

We are an authorized dealer of Sondex PHE plates in China. Sondex is one of the world's leading PHE and PHE plate manufacturers. We sell PHEs in China under our brands or on demand under the Sondex brand, while our PHE Units are sold only under our own brands. We believe our ability to provide Sondex-branded PHEs has contributed to our reputation for high quality products. Prior to our acquisition of Siping Beifang in 2009, we sourced all of our PHE plates, important raw elements used in both PHEs and PHE Units, from Sondex. However, our acquisition of Siping Beifang, along with our internal research and development efforts, enable us to produce our own plates for our heat exchangers, which has reduced our reliance on Sondex-supplied plates. We cannot assure you that our products will be as well received in the marketplace as products sold under the Sondex brand, or that we will be able to produce sufficient quantities to meet demand. If our relationship with Sondex were to terminate, we would be required to manufacture plates ourselves and procure plates from other third party sources, of which we believe there are several alternate suppliers that meet our volume and quality standards. Currently, we cannot guarantee our ability to manufacture sufficient plates or that we will be able to secure a supply of plates from third party sources on acceptable terms and in a timely fashion. Accordingly, termination of our Sondex relationship may present risks to our business, revenues and operations until we secure alternate and comparable sources of supply.

We may not be able to keep pace with rapid technological changes and competition in our industry, which could adversely impact our business, revenues and operations.

We believe we have hired or engaged personnel and outside consultants who have the experience and ability necessary to help us keep pace with advances in technology in the heating manufacturing industry. While we continue to seek out and develop "next generation" technology through our research and development efforts, there is no guarantee we will be able to keep pace with technological developments and market demands in this evolving industry and market. In addition, our industry is highly competitive. Although we believe we have developed strategic

relationships that will assist us to best penetrate the domestic China market, we face competition from other manufacturers of products similar to our products. Some of our competitors' advantages over us in the areas of products, marketing and services include: substantially greater revenues and financial resources; stronger brand names and consumer recognition; the capacity to leverage marketing expenditures across a broader portfolio of products; pre-existing relationships with potential customers; more resources to make acquisitions; lower labor and development costs; and broader geographic presence. Furthermore, we may experience delays in bringing new products to market, due to design, manufacturing or distribution problems. Any such delays could adversely affect our ability to compete effectively and may adversely affect our relationship with our customers. If we are unable to keep pace with the rapid technological changes and competition in our industry and market, our business, revenues and operations could be adversely impacted.

We will face different market dynamics and competition if we expand our market to other countries. In some international markets, our future competitors would have greater brand recognition and broader distribution than we have. We may not be as successful as our competitors in generating revenues in international markets due to our inability to provide products that are attractive to the markets in other countries, the lack of recognition of our brand and other factors. As a result, any international expansion efforts could be more costly and less profitable than our efforts in the domestic market in China, and could divert our management's attention away from our business in China.



## Table of Contents

Our products may contain defects, which if subject to product liability and warranty claims, could adversely affect our reputation and cause us to incur significant costs.

Due to the high pressures and temperatures at which many of our products are used, and the fact that some of our products are relied upon by our customers or end users in their facilities or operations, or are manufactured for relatively broad consumer use, we face an inherent risk of exposure to claims in the event that the failure, use or misuse of our products results, or is alleged to result, in bodily injury, property damage or economic loss. We believe we meet or exceed existing professional specification standards recognized or required in the industries in which we operate. Despite testing, however, defects may be found in our existing or new products. If we deliver products with defects, our credibility and the market acceptance and sales of our products could be harmed. Any such defects could cause us to undertake a product recall program, which would result in significant return and exchange costs, re-engineering costs, divert the attention of our engineering personnel from product development efforts and cause significant problems with customer relations and business reputation. We have been subject to product liability and warranty claims in the past, none of which has had a material adverse effect on our financial condition or results of operations, and we may be subject to claims in the future. Although we currently maintain product liability coverage, which we believe is adequate for the continued operation of our business, such insurance may become difficult to obtain or may become unobtainable in the future on terms acceptable to us and may not cover warranty claims. A successful product liability claim or series of claims against us, including one or more consumer claims purporting to constitute class actions, in excess of our insurance coverage or a significant warranty claim or series of claims against us could materially decrease our liquidity and impair our financial condition.

Our business could be subject to environmental liabilities in China, which could result in our incurring significant remediation costs, fines and loss of our business license.

As is the case with manufacturers of similar products, we use certain hazardous substances in our operations in China. Currently, our business is subject to the Environmental Protection Law of the PRC as well as other national and local laws in China regarding pollutant discharge, air, water and noise pollution. Although we believe we are in compliance in all material respects with the applicable PRC environmental laws and regulations, if it is determined that we are in violation of these regulations, we could be subject to financial penalties as well as the loss of the business licenses of one or more of our subsidiaries in China. Furthermore, if the national or local government in China adopts more stringent environmental regulations, we may incur significant costs in complying with such regulations. If we fail to comply with present or future environmental regulations, we may be required to pay substantial fines and remediation costs, suspend production or cease operations and may be subject to adverse publicity. We currently do not incur any material costs in connection with our compliance with the applicable PRC environmental laws. However, the risk of environmental liability and charges associated with maintaining compliance with PRC environmental laws is inherent in the nature of our business, and there is no assurance that material environmental liabilities and compliance charges will not arise in the future.

Our insurance coverage in China may be inadequate to protect us from potential losses.

The insurance industry in China is in its early stage of development and the business interruption insurance and the product liability insurance available currently in China offers limited coverage compared to that offered in many other countries, especially in the U.S. Any business disruption or natural disaster could result in substantial costs and a diversion of resources, which would have a material and adverse effect on our business and results of operations. Our business operations in China, particularly our production facilities in Shenyang, involve risks and hazards that could result in damage to, or destruction of, property and machinery, personal injury, business interruption and possible legal liability. We currently carry property and casualty insurance for our buildings, plant and equipment, but cannot assure you that the coverage will be adequate to fully replace damage to any of the foregoing. Should any natural catastrophes such as earthquakes, floods or any acts of terrorism occur where our primary operations are located and

most of our employees are based, or elsewhere, we might suffer not only significant property damage, but also loss of revenues due to interruptions in our business operations. We are unable to acquire product liability insurance in China because it is not currently available for our product lines, but we do maintain product liability coverage in Germany that we believe is adequate for the continued operation of our business in Europe, but such insurance may become difficult to obtain or may become unobtainable in the future on terms acceptable to us and may not cover warranty claims. A successful product liability claim or series of claims against us, including one or more consumer claims purporting to constitute class actions, in excess of our insurance coverage or a significant warranty claim or series of claims against us could materially decrease our liquidity and impair our financial condition. The occurrence of a significant event for which we are not fully insured or indemnified, or the failure of a party to meet its underwriting or indemnification obligations, could materially and adversely affect our operations and financial condition. Moreover, no assurance can be given that we will be able to maintain adequate insurance in the future at rates we consider reasonable.

Table of Contents

If we lose our key personnel or are unable to attract and retain additional qualified personnel, the quality of our services may decline and our business may be adversely impacted.

We rely heavily on the expertise, experience and continued services of our senior management, including our Chairman, President and Chief Executive Officer, Jun Wang. Loss of his services could adversely affect our ability to achieve our business objectives. Mr. Wang is a key factor in our success at developing and introducing new products and establishing new customer relationships because of his industry experience and reputation. The continued development of our business depends upon his continued employment. We have entered into an employment agreement with Mr. Wang, which contains provisions prohibiting competition with us should he leave our employ.

We believe our future success will depend upon our ability to retain Mr. Wang and other key employees and our ability to attract and retain other skilled personnel. The rapid growth of the economy in China has caused intense competition for qualified personnel. We cannot guarantee that any employee will remain employed by us for any period of time or that we will be able to attract, train or retain qualified personnel in the future. Such loss of personnel could have a material adverse effect on our business and company. Qualified employees periodically are in great demand and may be unavailable in the time frame required to satisfy our customers' requirements. There is no assurance we will be able to attract and retain sufficient numbers of highly skilled employees in the future. The loss of personnel or our inability to hire or retain sufficient personnel at competitive rates could impair the growth of our business.

Our bank accounts in China are not insured or protected against loss, and the failure of any bank in which we deposit our funds could affect our ability to continue in business.

We maintain our cash in China with various national banks in China. These cash accounts are not insured or otherwise protected against loss. Should any bank holding our cash deposits become insolvent, or if we are otherwise unable to withdraw funds, we would lose the cash on deposit with that particular bank. Depending upon the amount of cash we maintain in a bank that fails, our inability to have access to such cash deposits could impair our operations, and, if we are not able to access funds to pay our suppliers, employees and other creditors, we may be unable to continue in business.

We may need additional capital to execute our business plan and fund operations and may not be able to obtain such capital on acceptable terms or at all.

In connection with the ongoing development and expansion of our business, we may incur significant capital and operational expenses. We believe that we can increase our sales and net income by implementing a growth strategy that focuses on increasing sales of our products in China by targeting high growth end markets and expanding sales of heat pumps in China and Europe. Management anticipates that our existing capital resources, cash flows from operations, collection of our accounts receivable and proceeds from recent short-term loans will satisfy the liquidity requirements of our business for the next 12 months. However, if available funds are not sufficient to meet our plans for expansion or current operating expenses, our plans include pursuing alternative financing arrangements, including bank loans based on our good credit rating or funds raised through offerings of our equity or debt, if and when we determine such offerings are required. Our ability to obtain additional capital on acceptable terms or at all is subject to a variety of uncertainties, including:

- investors' perceptions of, and demand for, companies in our industry;
- investors' perceptions of, and demand for, companies operating in China;
- conditions of the U.S. and other capital markets in which we may seek to raise funds;
  - our future results of operations, financial condition and cash flows;
- governmental regulation of foreign investment in companies in particular countries;

- economic, political and other conditions in the U.S., China and other countries; and
  - governmental policies relating to foreign currency borrowings.

There is no assurance we will be successful in locating a suitable financing transaction in a timely fashion or at all. In addition, there is no assurance we will obtain the capital we require by any other means. Future financings through equity investments are likely to be dilutive to our existing shareholders. Also, the terms of securities we may issue in future capital transactions may be more favorable for our new investors. Newly-issued securities may include preferences or superior voting rights, be combined with the issuance of warrants or other derivative securities, or be the issuances of incentive awards under equity employee incentive plans, which may have additional dilutive effects. Furthermore, we may incur substantial costs in pursuing future capital and financing, including investment banking fees, legal fees, accounting fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we may issue, such as convertible notes and warrants, which will adversely impact our financial condition.

## Table of Contents

If we cannot raise additional funds on favorable terms or at all, we may not be able to carry out all or parts of our strategy to maintain our growth and competitiveness or to fund our operations. If the amount of capital we are able to raise from financing activities, together with our revenues from operations, is not sufficient to satisfy our capital needs, even to the extent that we reduce our operations accordingly, we may be required to cease operations.

We may not be able to protect our technology and other proprietary rights adequately, which could adversely affect our competitive position and reduce the value of our products and brands, and litigation to protect our intellectual property rights may be costly.

We attempt to strengthen and differentiate our product lines by developing new and innovative product designs and functionality. As a result, our patents, trademarks and other intellectual property rights are important assets to our business. Our success will depend in part on our ability to obtain and protect our products, methods, processes and other technologies, to preserve our trade secrets and to operate without infringing on the proprietary rights of third parties in China and abroad. Despite our efforts to preserve our intellectual property rights, any of the following occurrences may reduce the value of our intellectual property:

- Issued patents and trademarks may not provide us with any competitive advantages;
- Our efforts to protect our proprietary rights may not be effective in preventing misappropriation of our intellectual property;
- Our efforts may not prevent the development and design by others of products or technologies similar to or competitive with, or superior to those we develop; or
- Another party may obtain a blocking patent and we would need to either obtain a license or design around the patent in order to continue to offer the contested feature or service in our products.

Effective protection of our intellectual property rights may be unavailable or limited in China or certain other countries. Policing the unauthorized use of our proprietary technology can be difficult and expensive. Litigation might be necessary to protect our intellectual property rights, which may be costly and may divert our management's attention away from our core business. Furthermore, there is no guarantee that litigation would result in an outcome favorable to us. If we are unable to protect our proprietary rights adequately, it would have a negative impact on our operations.

We may be subject to claims that we have infringed the proprietary rights of others, which could require us to obtain a license or change our designs.

Although we do not believe any of our products infringe upon the proprietary rights of others, there is no assurance that infringement or invalidity claims, or claims for indemnification resulting from infringement claims, will not be asserted or prosecuted against us or that any such assertions or prosecutions will not have a material adverse effect on our business. Regardless of whether any such claims are valid or can be asserted successfully, defending against such claims could cause us to incur significant costs and could divert resources away from our other activities. In addition, assertion of infringement claims could result in injunctions that prevent us from distributing our products. If any claims or actions are asserted against us, we may seek to obtain a license to the intellectual property rights that are in dispute. Such a license may not be available on reasonable terms, or at all, which could force us to change our designs.

If we fail to maintain an effective system of internal controls, we may not be able to report our financial results accurately. Any inability to report and file our financial results accurately and timely could harm our business and adversely affect the trading price of our common stock.

We are required to establish and maintain internal controls over financial reporting, disclosure controls and procedures and to comply with other requirements of the Sarbanes-Oxley Act and the rules promulgated by the SEC. Our

management, including our Chief Executive Officer and Chief Financial Officer, cannot guarantee our internal controls and disclosure controls will prevent all possible errors. Because of the inherent limitations in all control systems, no system of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the possibility that judgments in decision-making can be faulty and subject to simple error or mistake. Furthermore, controls can be circumvented by individual acts of some persons, by collusion of two or more persons, or by management override of the controls. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, a control may become inadequate because of changes in conditions or the degree of compliance with policies or procedures may deteriorate. Because of inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected. Our inability or failure to report and file our financial results accurately and timely could harm our business and the trading price of our common stock.

Table of Contents

Our management carried out an evaluation of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting was not effective as of December 31, 2011, because of one identified material weakness in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented, or detected and corrected on a timely basis. The material weakness identified relates to the lack of sufficient internal accounting personnel with appropriate levels of knowledge, experience and training in generally accepted accounting principles in the U.S., or U.S. GAAP, for the preparation of financial statements in accordance with U.S. GAAP. Furthermore, our management concluded that, as of December 31, 2011, our disclosure controls and procedures were not effective because of this identified material weakness in our internal control over financial reporting. See “Item 9A. Controls and Procedures.” Our Board of Directors and management are evaluating remediation measures that we will undertake to address this material weakness and will continue this evaluation in order to implement a comprehensive remediation plan. Until such time as we hire qualified accounting staff or train our current accounting staff with the requisite U.S. GAAP experience, however, it is unlikely we will be able to remediate this material weakness in our internal control over financial reporting.

Our accounting personnel who are primarily responsible for the preparation and supervision of the preparation of our financial statements under U.S. GAAP have limited relevant education and training in U.S. GAAP and SEC rules and regulations pertaining to financial reporting, which could impact our ability to prepare our financial statements and convert our books and records to U.S. GAAP.

Our operations principally are in China and we have maintained our books and records in accordance with generally accepted accounting principles in the PRC, or PRC GAAP. Our accounting personnel in the PRC who have the primary responsibilities of preparing and supervising the preparation of financial statements under U.S. GAAP have limited relevant education and training in U.S. GAAP and related SEC rules and regulations. As such, they may be unable to identify potential accounting and disclosure issues that may arise upon the conversion of our books and records from PRC GAAP to U.S. GAAP, which could affect our ability to prepare our financial statements in accordance with U.S. GAAP. We have taken steps to ensure that our financial statements are prepared in accordance with U.S. GAAP, including our hiring of a U.S. accounting firm to work with our PRC accounting personnel and management to convert our books and records to U.S. GAAP and prepare our financial statements. We implemented an internal audit department and retained an outside internal control consultant for risk assessment, documentation of process-level and entity-level controls, internal control testing and evaluation of deficiencies. In addition, our annual financial statements are audited by an independent auditor for compliance with U.S. GAAP and to ensure that all necessary and appropriate adjustments from PRC GAAP to U.S. GAAP have been made. However, the measures we have taken may not be sufficient to mitigate the foregoing risks associated with the limited education and training of our accounting personnel in U.S. GAAP and related SEC rules and regulations.

We are a holding company that depends on cash flow from our wholly owned subsidiaries to meet our obligations, and any inability of our subsidiaries to pay us dividends or make other payments to us when needed could disrupt or have a negative impact on our business.

After our acquisition of Taiyu in 2008, we became a holding company with no material assets other than the ownership interests of our subsidiaries through which we conduct operations. We rely on dividends paid by our subsidiaries for our cash needs, including the funds necessary to pay dividends and other cash distributions to our shareholders, to service any debt we may incur and to pay our operating expenses. China has currency and capital transfer regulations that require us to comply with complex regulations for the movement of capital. PRC regulations currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. Our PRC subsidiaries also are required to set aside at least 10% of net income after taxes based on PRC accounting standards each year to statutory surplus reserves until the cumulative amount of such reserves reaches 50% of registered capital. These reserves are not distributable as cash dividends. Our PRC

subsidiaries also may allocate a portion of their after-tax profits to their staff welfare and bonus funds, which may not be distributed to equity owners except in the event of liquidation. Furthermore, if any of our subsidiaries incur debt, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Accordingly, if our subsidiaries are unable to pay us dividends and make other payments to us when needed because of regulatory restrictions or otherwise, we may be materially and adversely limited in our ability to make investments or acquisitions that could be beneficial to our business, pay dividends or otherwise fund and conduct our business.



Table of Contents

Risks Related to Doing Business in China

Inflation in China could negatively affect our profitability and growth.

The rapid growth of China's economy has been uneven among economic sectors and geographic regions of the country and has been fueled over the last three years by a large amount of debt issuances. China's economy grew at an annual rate of 9.2% in 2011, as measured by the year-over-year change in GDP according to the National Bureau of Statistics of China, or the NBS. Rapid economic growth and less restrictive monetary policies can lead to growth in the money supply and rising inflation. According to the NBS, the annual inflation rate in China, as measured by the year-over-year change in consumer price index, was 5.4% in 2011. If prices for our products and services fail to rise at a rate sufficient to compensate for the increased costs of supplies, such as raw materials, due to inflation, it may have an adverse effect on our profitability. Additionally, customers generally purchase our products as part of their capital budget. Our business for our products is therefore dependent in part upon the economic health of our customers and our customers' industries. Any change in monetary policy or economic slowdown can affect all purchasers and manufacturers of capital equipment, and we cannot assure you that our business will not be significantly impaired as a result.

To control inflation in the past, the PRC government has imposed controls on bank reserve requirement ratios, bank credits, limits on loans for fixed assets and restrictions on state bank lending. In particular, in response to inflationary concerns, the PRC government instituted tightened fiscal policies in 2011 that contributed to a general slowdown in many sectors of China's economy and restricted bank lending practices. Accordingly, many state-owned enterprises in China, including real estate developers, encountered difficulties in 2011 in obtaining grants from the PRC government and faced an extended bank loan application process, both of which typically are used to finance the purchase of our products. If the PRC government continues its deflationary policies and efforts to stabilize economic growth in China, such disruptions may continue to adversely impact the capital needs of our customers, which, in turn, could adversely affect our results of operations, cash flows and financial condition. In addition, the People's Bank of China, or the PBOC, which is the central bank of the PRC, has effected several increases in interest rates in response to inflationary concerns in China's economy. The implementation of such policies may further impede future economic growth. If the PBOC continues to raise interest rates, economic activity in China could further slow and, in turn, materially increase our costs and reduce demand for our products and services.

Changes in China's political and economic policies could have a material adverse effect on the overall economic growth of China, which could reduce the demand for our products and adversely affect our business.

Substantially all of our manufacturing and productive assets are located in China and a significant percentage of our revenue is derived from our operations in China. Accordingly, our results of operations and prospects are subject to the economic, political and legal developments in China. While China's economy has experienced significant growth in the past twenty years, such growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may have a negative effect on us. For example, our operating results and financial condition may be adversely affected by PRC government control over capital investments or changes in tax regulations. In recent years, the PRC government has implemented measures emphasizing the utilization of market forces for economic reform and the reduction of state ownership of productive assets, and the establishment of corporate governance in business enterprises; however, a substantial portion of productive assets in China are still owned by the PRC government. In addition, the PRC government continues to play a significant role in regulating industry development by imposing industrial policies. It also exercises significant control over China's economic growth through the allocation of resources, the control of payment of foreign currency-denominated obligations, the setting of monetary policy, the control of the housing and real estate market and the provision of preferential treatment to particular industries or companies. Any adverse change in the economic conditions or government policies in China

could have a material adverse effect on the overall economic growth and level of capital expenditures in China, which in turn could lead to reduced demand for our products and consequently have a material adverse effect on our business. Furthermore, changes in policies, laws and regulations or in their interpretation or the imposition of confiscatory taxation, restrictions on currency conversion, restrictions or prohibitions on dividend payments to shareholders, or devaluations of currency could cause a decline in the price of our common stock.

We may have difficulty establishing adequate management, legal and financial controls in China, which could affect our ability to report our financial results accurately and timely.

Historically, China has not adopted an international style of management or financial reporting concepts and practices, nor modern banking, computer and other control systems. We may have difficulty in hiring and retaining a sufficient number of qualified employees to work in China. As a result of these factors, we may experience difficulty in establishing management, legal and financial controls, collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices for our subsidiaries in China that meet international standards.

## Table of Contents

If relations between the U.S. and China worsen, our business could be adversely affected and investors may be unwilling to hold or buy our stock and our stock price may decrease.

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

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

The legal system in China is a civil law system. Unlike the common law system, the civil law system is based on written statutes in which decided legal cases have little value as precedents. In 1979, China began to promulgate a comprehensive system of laws and has since introduced many laws and regulations to provide general guidance on economic and business practices in China and to regulate foreign investment. Progress has been made in the promulgation of laws and regulations dealing with economic and commercial matters, but these recently enacted laws and regulations may not cover all aspects of business activities in China sufficiently. In particular, because these laws and regulations are relatively new, the interpretation and enforcement of these laws and regulations involve uncertainties, which may limit legal protections available to us. In addition, the PRC legal system is based in part on government policies and internal rules (some of which are not published on a timely basis or at all) that may have a retroactive effect. As a result, there may be certain instances when we may not be aware of our violation of these policies and rules until some time after such violation. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

The PRC government has enacted some laws and regulations dealing with matters such as corporate organization and governance, foreign investment, commerce, taxation and trade. Our ability to enforce commercial claims or to resolve commercial disputes under these laws and regulations is unpredictable, however, because the implementation, interpretation and enforcement of these laws and regulations is limited and, given their relative newness, involve uncertainties. For example, contracts governed by PRC law tend to contain less detail than those under U.S. law and generally are not as comprehensive in defining the rights and obligations of the contracting parties. Consequently, contracts in China are more vulnerable to disputes and legal challenges than those in the U.S. In addition, contract interpretation and enforcement in China is not as developed as in the U.S., and the result of any contract dispute is subject to significant uncertainties. We currently are not subject to any contract dispute, but we cannot assure you that we will not be subject to future contract disputes with our suppliers, franchisees and other customers under contracts governed by PRC law, and if such disputes arise, we cannot assure you that we will prevail.

Furthermore, the political, governmental and judicial systems in China sometimes are impacted by corruption. There is no assurance we will be able to obtain recourse in any legal disputes with the suppliers, customers or other parties with whom we conduct business, if desired, through China's developing and sometimes corrupt judicial systems. Any rights we may have under PRC law to specific performance or to seek an injunction are severely limited, and without a means of recourse by virtue of the PRC legal system, we may be unable to prevent these situations from occurring. The occurrence of any such events could have a material adverse effect on our business, financial condition and results of operations.

It will be extremely difficult to acquire jurisdiction and enforce liabilities against our officers, directors and assets based in China.

As our executive officers and several of our directors, including the Chairman of our Board of Directors, are citizens of the PRC, it may be difficult, if not impossible, to acquire jurisdiction over these persons in the event a lawsuit is

initiated against us or our officers and directors by a shareholder or group of shareholders in the U.S. Also, because many of our operating subsidiaries and assets are located in China, it may be extremely difficult or impossible for individuals to access those assets to enforce judgments rendered against us or our directors or executive offices by U.S. courts. In addition, the courts in China may not permit the enforcement of judgments arising out of U.S. federal and state corporate, securities or similar laws. Accordingly, U.S. investors may not be able to enforce judgments against us for violation of U.S. securities laws.

Fluctuation of the Renminbi and Euro may affect our financial condition and the value of our securities.

Although we use the USD for financial reporting purposes, transactions effected by our subsidiaries in China are denominated in RMB and those by our subsidiary in Germany are denominated in EUR. The value of the RMB and EUR fluctuates and are subject to changes in the political and economic conditions in China and Europe, respectively. In particular, from June 2008 to June 2010, the RMB was pegged to the USD, but it has since been managed more flexibly. Because the PBOC regularly intervenes in the foreign exchange market to prevent significant short-term fluctuations in the exchange rate, the RMB may appreciate or depreciate significantly in value against the USD in the medium to long term. Moreover, it is possible that in the future the PRC authorities may lift restrictions on fluctuations in the RMB exchange rate and lessen intervention in the foreign exchange market.

## Table of Contents

Future movements in the exchange rate of the RMB could adversely affect our financial condition as substantially all of our operations and sales are transacted in RMB and we may suffer financial losses when transferring money raised outside of China into the country or paying vendors for services performed outside of China. Historically, we have not engaged in hedging activities to mitigate this risk of fluctuating exchange rates and have no current intention of doing so. Moreover, fluctuations in the exchange rate between the USD and RMB will affect our financial results reported in USD terms without giving effect to any underlying change in our business, financial condition or results of operations. The value of our common stock likewise will be affected by the foreign exchange rate between the USD and RMB, and between those currencies and other currencies in which our sales may be denominated. Fluctuations in the exchange rate will also affect the relative value of any dividend we may issue in the future that will be exchanged into USD and earnings from, and the value of, any USD-denominated investments we make in the future. For example, if we need to convert USD into RMB for our operational needs and the RMB appreciates against the USD at that time, our financial position, our business and the price of our common stock may be harmed. Conversely, if we decide to convert our RMB into USD for the purpose of declaring dividends on our common stock or for other business purposes and the USD appreciates against the RMB, the USD equivalent of our earnings from our subsidiaries in China would be reduced.

PRC regulations relating to mergers, offshore companies and PRC shareholders, if applied to us, may limit our ability to operate our business as we see fit.

PRC regulations govern the process by which we may participate in an acquisition of assets or equity interests and may make loans and direct investments to our subsidiaries in China. Depending on the structure of the transaction, these regulations require involved parties to make a series of applications and supplemental applications to various government agencies. In some instances, the application process may require the presentation of economic data concerning a transaction, including appraisals of the target business and evaluations of the acquirer, which are designed to allow the government to assess the transaction. Government approvals will have expiration dates by which a transaction must be completed and reported to the government agencies. Compliance with the new regulations is likely to be more time consuming and expensive than in the past and the government can now exert more control over the combination of two businesses. Accordingly, due to PRC regulations, our ability to engage in business combination transactions in China through our PRC subsidiaries has become significantly more complicated, time consuming and expensive, and we may not be able to negotiate transactions that are acceptable to us or sufficiently protective of our interests. Furthermore, loans and capital contributions from an offshore holding company such as us to its subsidiaries in China are subject to PRC regulations and approval. For example, loans by us to our subsidiaries in China, which are foreign-invested enterprises, to finance their activities cannot exceed statutory limits and must be registered with the SAFE. Similarly, the PRC Ministry of Commerce, or MOFCOM, or its local counterpart must approve any capital contribution by us to our PRC subsidiaries. We cannot assure you that we will be able to obtain these government approvals on a timely basis, if at all, with respect to future loans or capital contributions by us to our subsidiaries.

Restrictions on currency exchange may limit our ability to receive and use our revenues effectively.

The RMB is currently convertible under the “current account,” which includes dividends, trade and service-related foreign exchange transactions, but not under the “capital account,” which includes foreign direct investment and loans. Currently, our subsidiaries in China may purchase foreign currencies for settlement of current account transactions, including payments of dividends to us, without the approval of the SAFE. However, the relevant PRC government authorities may limit or eliminate their ability to purchase foreign currencies in the future. Since a significant amount of our future revenues will be denominated in RMB, any existing and future restrictions on currency exchange may limit our ability to utilize revenues generated in RMB to fund our business activities outside China that are denominated in foreign currencies.

On August 29, 2008, the SAFE promulgated Circular 142, the Notice on Perfecting Practices Concerning Foreign Exchange Settlement Regarding the Capital Contribution by Foreign-invested Enterprises, to regulate the conversion by foreign-invested enterprises, or FIEs, of foreign currency into RMB by restricting how the converted RMB may be used. Circular 142 requires that RMB converted from the foreign currency-dominated capital of a FIE may only be used for purposes within the business scope approved by the applicable government authority and may not be used for equity investments within the PRC unless specifically provided for otherwise. In addition, the SAFE strengthened its oversight over the flow and use of RMB funds converted from the foreign currency-dominated capital of a FIE. The use of such RMB may not be changed without approval from the SAFE, and may not be used to repay RMB loans if the proceeds of such loans have not yet been used. These limitations could affect the ability of our subsidiaries in China to obtain foreign exchange through debt or equity financing.

Table of Contents

If the China Securities Regulatory Commission, or CSRC, or another PRC regulatory agency determines that its approval is required in connection with our public offerings, we may become subject to penalties.

On August 8, 2006, six PRC regulatory agencies, including the CSRC, promulgated the Regulation on Mergers and Acquisitions of Domestic Companies by Foreign Investors, or the M&A Regulations, which became effective on September 8, 2006. The M&A Regulations, among other things, have certain provisions that require offshore special purpose vehicles, or SPVs, formed for the purpose of acquiring PRC domestic companies and controlled by PRC individuals, to obtain the approval of the CSRC prior to listing their securities on an overseas stock exchange. We believe, based on the opinion of our PRC legal counsel, the Beijing Rondos Law Firm, that while the CSRC generally has jurisdiction over overseas listings of SPVs like us, CSRC's approval is not required for the offerings of our securities because our current corporate structure was established before the new regulation became effective. However, there remains some uncertainty as to how this regulation will be interpreted or implemented in the context of an overseas offering. If the CSRC or another PRC regulatory agency subsequently determines that its approval is required for our public offerings, we may face sanctions by the CSRC or another PRC regulatory agency. If this happens, these regulatory agencies may impose fines and penalties on our operations in the PRC, limit our operating privileges in the PRC, delay or restrict the repatriation of the proceeds from our public offerings into the PRC, restrict or prohibit payment or remittance of dividends by our PRC subsidiaries to us or take other actions that could have a material adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ordinary shares.

We operate in the PRC through our operating entities whose foreign-investment status has been approved by the local offices of MOFCOM. If MOFCOM subsequently determines that such approval procedures have not been completely satisfied for our foreign-invested enterprises, we may lose the WFOE status of certain of our subsidiaries, which could negatively impact our business in China.

Our operating entities in the PRC have received approval from their respective local offices of MOFCOM as WFOEs and foreign-invested joint ventures. We believe we have satisfied all MOFCOM approval procedures for having obtained such status, but there may be conditions subsequent to complete and maintain such status. In particular, we believe that our acquisition of Taiyu, a privately held Sino-foreign joint venture company, in 2008 was not subject to the 2006 M&A Regulations but instead the 1997 Provisions on Changes in Equity Interest of Foreign Investment Enterprises, which do not require the approval of MOFCOM's central office in connection with the acquisition of interests in a foreign-invested entity operating in an industry not restricted or prohibited under PRC law. The meaning of many of the provisions of the M&A Regulations is still unclear, however, and PRC regulators have wide latitude in the enforcement of these and other relevant regulations. Consequently, the MOFCOM approval procedures or interpretations of its approval procedures may be different from our understanding or may change. If MOFCOM subsequently determines that we should have obtained the approval of MOFCOM's central office for our investments in any or all of our PRC foreign-invested subsidiaries, we may need to apply for a remedial approval or waiver of such approval requirements, and may be subject to certain administrative punishments or other sanctions from PRC regulatory agencies. As a result, if we lose the WFOE status of any of our PRC operating subsidiaries for any reason, there may be a material adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our shares of common stock.

PRC regulations relating to the registration requirements for PRC resident shareholders owning shares in offshore companies may subject our PRC resident shareholders to personal liability and limit our ability to acquire companies in China or to inject capital into our operating subsidiaries in China, limit our subsidiaries' ability to distribute profits to us or otherwise materially and adversely affect our business.

The SAFE issued a public notice in October 2005, Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Corporate Financing and Roundtrip Investment through Offshore Special Purpose Vehicles,

which we refer to as Circular 75, requiring PRC residents, including both legal persons and natural persons, to register with the competent local SAFE branch before establishing or controlling any company outside of China, referred to as an “offshore special purpose company,” for the purpose of acquiring any assets of or equity interest in PRC companies and raising funds from overseas. In addition, any PRC resident who is the shareholder of an offshore special purpose company is required to amend his or her SAFE registration with the local SAFE branch, with respect to that offshore special purpose company in connection with any increase or decrease of capital, transfer of shares, merger, division, equity investment or creation of any security interest over any assets located in China. If any PRC resident who is the shareholder of an offshore special purpose company fails to comply with the SAFE registration requirements, the PRC subsidiaries of the offshore special purpose company may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to their offshore parent company and the offshore parent company may be restricted in its ability to contribute additional capital into its PRC subsidiaries. Moreover, failure to comply with the SAFE registration requirements could result in liabilities under PRC laws for evasion of foreign exchange restrictions. Although we believe that our PRC subsidiaries are in compliance with these regulations, should these regulations or the interpretation of them by course or regulatory agencies change, we may not be able to pay dividends outside of China. We do not believe that we have incurred a liability because of noncompliance with Circular 75 under SAFE registration procedures, however. Accordingly, we cannot predict fully how Circular 75 will affect our business operations or future strategies because of ongoing uncertainty over how Circular 75 is interpreted and implemented, and how or whether SAFE will apply it to us.



## Table of Contents

We have requested our PRC resident beneficial owners, including our Chairman and Chief Executive Officer, to make the necessary applications, filings and amendments as required under SAFE regulations in connection with their equity interests in us and our acquisitions of equity interests in our PRC subsidiaries. We cannot provide any assurances that all of our present or prospective direct or indirect PRC resident beneficial owners have or will comply fully with all applicable registrations or required approvals. The failure or inability of our PRC resident beneficial owners to comply with the applicable SAFE registration requirements may subject these beneficial owners or us to fines, legal sanctions and restrictions described above.

On March 28, 2007, SAFE promulgated the Operating Procedures for Foreign Exchange Administration of Domestic Individuals Participating in Employee Stock Ownership Plans and Stock Option Plans of Offshore Listed Companies, or Circular 78. Under Circular 78, PRC citizens granted stock options by an offshore listed company are required, through an agent in China or a PRC subsidiary of the offshore listed company, to register with SAFE and complete certain other procedures, including applications for foreign exchange purchase quotas and opening special bank accounts. Failure to comply with these regulations may subject us or our PRC employees that receive stock option grants from us to fines and legal sanctions imposed by SAFE or other PRC government authorities and may prevent us from further granting stock options under our equity incentive plans to our PRC-citizen employees in China. Such events could adversely affect our business operations.

PRC labor laws may adversely affect our results of operations.

On June 29, 2007, the PRC government promulgated the Labor Contract Law of the PRC, effective on January 1, 2008, to govern the establishment of employment relationships between employers and employees, and the conclusion, performance, termination of and the amendment to employment contracts. The Labor Contract Law imposes greater liabilities on employers and significantly affects the cost of an employer's decision to reduce its workforce. Further, it requires that certain terminations be based upon seniority and not merit. In the event we decide to significantly change or decrease our workforce in China, the Labor Contract Law could adversely affect our ability to effect such changes in a manner that is most advantageous to our business or in a timely and cost-effective manner, thus materially and adversely affecting our financial condition and results of operations.

Under the Enterprise Income Tax Law, we may be classified as a "resident enterprise" of China. Such classification will likely result in unfavorable tax consequences to us and our non-PRC resident shareholders.

China passed the Enterprise Income Tax Law, or the EIT Law, and its implementing rules, both of which became effective on January 1, 2008. Under the EIT Law, an enterprise established outside of China with "de facto management bodies" within China is considered a "resident enterprise," meaning that it must be treated as a PRC domestic enterprise for enterprise income tax purposes. The implementing rules of the EIT Law define de facto management as "substantial and overall management and control over the production and operations, personnel, accounting, and properties" of the enterprise.

On April 22, 2009, the PRC State Administration of Taxation, or the SAT, issued the Notice Concerning Relevant Issues Regarding Cognizance of Chinese Investment Controlled Enterprises Incorporated Offshore as Resident Enterprises pursuant to Criteria of de facto Management Bodies, or the Notice, further interpreting the application of the EIT Law and its implementation regarding non-PRC enterprise or group controlled offshore entities. Pursuant to the Notice, an enterprise incorporated in an off-shore jurisdiction and controlled by a PRC enterprise or group will be classified as a "non-domestically incorporated resident enterprise" if: (i) its senior management in charge of daily operations reside or perform their duties mainly in China; (ii) its financial or personnel decisions are made or approved by bodies or persons in China; (iii) its substantial assets and properties, accounting books, corporate chops, board and shareholder minutes are kept in China; and (iv) at least half of its directors with voting rights or senior management often reside in China. A "resident enterprise" would be subject to an enterprise income tax rate of 25% on

its worldwide income and must pay a withholding tax at a rate of 10% when paying dividends to its non-PRC shareholders. However, detailed measures on imposition of tax from non-domestically incorporated resident enterprises are not yet available. Therefore, it is unclear how tax authorities will determine tax residency based on the facts of each case.

We may be deemed to be a “resident enterprise” by PRC tax authorities. If the PRC tax authorities determine that we are a “resident enterprise” for PRC enterprise income tax purposes, a number of unfavorable PRC tax consequences could follow. First, we may be subject to the enterprise income tax at a rate of 25% on our worldwide taxable income as well as PRC enterprise income tax reporting obligations. In our case, this would mean that income such as interest on financing proceeds and non-China source income would be subject to PRC enterprise income tax at a rate of 25%. Second, although under the EIT Law and its implementing rules dividends paid to us from our PRC subsidiaries would qualify as “tax-exempt income,” we cannot guarantee that such dividends will not be subject to a 10% withholding tax, as the PRC foreign exchange control authorities, which enforce the withholding tax, have not yet issued guidance with respect to the processing of outbound remittances to entities that are treated as “resident enterprises” for PRC enterprise income tax purposes. Finally, it is possible that future guidance issued with respect to the new “resident enterprise” classification could result in a situation in which a 10% withholding tax is imposed on dividends we pay to our non-PRC shareholders and with respect to gains derived by our non-PRC shareholders from transferring our shares. If we were treated as a “resident enterprise” by PRC tax authorities, we would be subject to taxation in both the U.S. and China, and our PRC tax may not be creditable against our U.S. tax.

Table of Contents

Dividends distributed from our PRC subsidiaries to our non-PRC resident shareholders would be subject to U.S. and PRC withholding taxes.

We are a Nevada holding company and substantially all of our income is derived from dividends we receive from our subsidiaries, including those in China. Pretax earnings of a foreign subsidiary are subject to U.S. taxation when effectively repatriated. We currently consider the undistributed earnings of our PRC subsidiaries to be invested indefinitely and, accordingly, record no deferred U.S. tax expense on such earnings. If our PRC subsidiaries were to distribute dividends to us, the dividends would be subject to U.S. and PRC withholding taxes. Before the EIT Law came into effect on January 1, 2008, dividends paid to foreign investors by FIEs, such as dividends paid to us by our subsidiaries in China, were exempt from PRC withholding tax. Pursuant to the EIT Law, dividends generated after January 1, 2008, and distributed to us by our subsidiaries in China are subject to withholding tax at a rate of 5%, provided that we are determined by the relevant PRC tax authorities to be a “non-resident enterprise” under the EIT Law and hold at least 25% of the equity interest of our subsidiaries. If we are determined to be a “resident enterprise,” we cannot guarantee that such dividends will not be subject to a 10% withholding tax, as the PRC foreign exchange control authorities, which enforce the withholding tax, have not yet issued guidance with respect to the processing of outbound remittances to entities that are treated as “resident enterprises” for PRC enterprise income tax purposes.

The SAT promulgated “Notice on How to Understand and Determine the Beneficial Owners in Tax Agreement” on October 27, 2009, or SAT Circular 601, which provides guidance for determining whether a resident of a contracting state is the “beneficial owner” of an item of income under China’s tax treaties and tax arrangements. According to SAT Circular 601, a beneficial owner generally must be engaged in substantive business activities. An agent or conduit company will not be regarded as a beneficial owner and, therefore, will not qualify for treaty benefits. The agent or conduit company normally refers to a company that is registered in a jurisdiction other than China and merely meets the minimum legal requirements on organizational form and is not engaged in substantive operational activities for manufacturing, distribution or management. It is still unclear how SAT Circular 601 is implemented by SAT or its local counterparts in practice and whether we could be recognized as a “beneficial owner.” If we are deemed a non-resident enterprise but not qualified as a beneficial owner, we will not be entitled to a reduced 5% withholding tax and the 10% withholding tax would be imposed on any dividend income received from our subsidiaries in China. As a result, our net income would be reduced and our operating results would be adversely affected.

Tax laws and regulations in China are subject to revision, some of which may adversely affect our profitability, and the termination of certain preferential tax treatment for which we are eligible in China may adversely affect our net income.

The PRC corporate tax regime continues to undergo revision. Tax benefits that we presently enjoy may not be available to us in the wake of these changes, and we could incur tax obligations to the PRC government that are significantly higher than currently anticipated. These increased tax obligations could negatively affect our financial condition and our revenues, gross margins, profitability and results of operations may be adversely affected as a result.

Furthermore, certain tax exemptions that certain of our subsidiaries presently enjoy in China are scheduled to expire after 2012. Taiyu and SanDeKe are governed by the Income Tax Law of the PRC concerning privately run 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. Taiyu has been classified as a high-tech enterprise eligible for certain tax benefits, including a preferential enterprise income tax rate of 15% through 2012. SanDeKe is entitled to a 50% discount on its income tax rate from 2010 through 2012, resulting in an income tax rate of 12% and 11% for 2011 and 2010, respectively. We plan to apply for renewal of these preferential tax benefits for Taiyu and SanDeKe after 2012. If these tax benefits enjoyed by Taiyu and SanDeKe expire without renewal, however, our income tax expenses will increase, which will reduce our net income.

Our compliance with the Foreign Corrupt Practices Act may put us at a competitive disadvantage, while our failure to comply with the Foreign Corrupt Practices Act may result in substantial penalties.

We are required to comply with the United States Foreign Corrupt Practices Act, or the FCPA, which prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. Although we inform our personnel that such practices are illegal, we cannot assure you that our employees or other agents will not engage in such conduct for which we might be held responsible. If our employees or other agents are found to have engaged in such practices, we could suffer severe penalties. Non-U.S. companies, including some of our competitors, are not subject to the provisions of the FCPA. Corruption, extortion, bribery, pay-offs, theft and other fraudulent practices occur from time to time in mainland China. If our competitors engage in these practices, they may receive preferential treatment from personnel of some companies, giving our competitors an advantage in securing business or from government officials who might give them priority in obtaining new licenses, which would put us at a disadvantage.

## Table of Contents

### Risks Related to Our Securities

The market price for our common stock may be volatile, which could make it more difficult or impossible for you to sell our common stock for a positive return on your investment.

The trading price of our common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include, but are not limited to, our quarterly operating results or the operating results of other companies in our industry, announcements by us or our competitors of acquisitions, new products, product improvements, commercial relationships, intellectual property, legal, regulatory or other business developments and changes in financial estimates or recommendations by stock market analysts regarding us or our competitors. In addition, the stock market in general, and in particular the market for companies with substantial operations based in China, that became public by means of a reverse acquisition with a public shell company or that recently effected a reverse stock split, has experienced extreme price and volume fluctuations. This volatility has had a significant effect on the market prices of securities issued by many companies for reasons unrelated or disproportionate to their operating performance. These broad market fluctuations may have a material adverse effect on our stock price, regardless of our operating results. Further, the market for our common stock is limited and we cannot assure you that a larger market will ever be developed or maintained. Market fluctuations and volatility, as well as general economic, market and political conditions, could reduce our market price. As a result, these factors may make it more difficult or impossible for you to sell our common stock for a positive return on your investment.

We have experienced difficulties maintaining compliance with the minimum bid requirements for the continued listing of our common stock on the NASDAQ Global Select Market, and any future failure to comply with such requirements could result in the delisting of our common stock from that trading market.

In September 2011, we received notice from the Listing Qualifications Department of the NASDAQ Stock Market LLC indicating that, for a period of 30 consecutive business days, the bid price for our common stock had closed below the minimum \$1.00 per share bid closing price required for continued inclusion on the NASDAQ Global Select Market. We met, and continue to meet, all other continued listing criteria. In order to regain compliance, shares of our common stock needed to maintain a minimum bid closing price of at least \$1.00 per share for a minimum of ten consecutive business days. Effective on February 7, 2012, we implemented a one-for-ten reverse stock split of our common stock with the intent to increase the per share trading value of our common stock. On February 22, 2012, we received notice from the Listing Qualifications Department that the closing bid price of our common stock had been at \$1.00 per share or greater for a period of ten consecutive business days and that our common stock had regained compliance.

Notwithstanding the foregoing compliance issues, our common stock has been continuously listed on the NASDAQ Global Select Market without interruption. In order to preserve our listing status, we must remain in compliance with all applicable continued listing criteria, including but not limited to the minimum bid price requirements described above. We can provide no assurance that we will remain in compliance with such listing requirements, or that our common stock will continue to be listed on the NASDAQ Global Select Market or any other market.

Our quarterly results may be volatile, which could materially affect the per share price of our common stock.

Our operating results have varied on a quarterly basis during our operating history and are likely to fluctuate significantly in the future. Many factors, including the risk factors incorporated by reference herein, could cause our revenues and operating results to vary significantly in the future. Many of these factors are outside of our control. Accordingly, we believe that quarter-to-quarter comparisons of our operating results are not necessarily meaningful. Investors should not rely on the results of one quarter as an indication of our future performance. If our results of operations in any quarter do not meet analysts' expectations, our stock price could materially decrease.

Future sales of our stock could depress the market price of our common stock and cause our stock price to decline.

Future sales of shares of our common stock could adversely affect the prevailing market price of our stock. If our significant stockholders sell a large number of shares, or if we issue a large number of shares, the market price of our common stock could significantly decline. Moreover, the perception in the public market that our significant stockholders might sell shares of our common stock could depress the market for our shares. If such shareholders sell substantial amounts of our common stock in the public market, such sales could create a circumstance commonly referred to as an “overhang,” in anticipation of which the market price of our common stock could fall. The existence of an overhang, whether or not sales have occurred or are occurring, also could make it more difficult for us to raise additional financing through the sale of equity or equity-related securities in the future at a time and price we deem reasonable or appropriate.

Table of Contents

We may issue additional shares of our capital stock or debt securities to raise capital or complete acquisitions, which would reduce the equity interest of our stockholders.

Our Articles of Incorporation authorize the issuance of up to 75,000,000 shares of common stock, par value \$0.001 per share. As of March 28, 2012, there were 71,038,226 authorized and unissued shares of our common stock available for future issuance, based on 3,955,774 shares of our common stock outstanding and our reservation of 6,000 shares of our common stock issuable upon exercise of outstanding options. Although we have no commitments as of the date of this report to issue our securities, we may issue a substantial number of additional shares of our common stock to complete a business combination or to raise capital. The issuance of additional shares of our common stock may significantly reduce the equity interest of our existing stockholders and may adversely affect prevailing market prices for our common stock.

We have not paid dividends in the past and do not expect to pay dividends in the future. Any return on investment may be limited to the value of our common stock.

We have never paid cash dividends on our common stock and do not anticipate doing so in the foreseeable future. The payment of dividends on our common stock will depend on earnings, financial condition and other business and economic factors affecting it at such time as the Board of Directors may consider relevant. Furthermore, China has currency and capital transfer regulations that require us to comply with complex regulations for the movement of capital. See “Risks Related to Our Business – We are a holding company that depends on cash flow from our wholly owned subsidiaries to meet our obligations.” Although our management believes that we are in compliance with these regulations, should these regulations or the interpretation of them by PRC courts or regulatory agencies change, we may not be able to pay dividends to our shareholders outside of China. Our management intends to follow a policy of retaining all of our earnings to finance the development and execution of our strategy and the expansion of our business. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if our stock price appreciates.

One of our principal shareholders has the ability to exert significant control in matters requiring a shareholder vote and could delay, deter or prevent a change of control in our company.

As of March 28, 2012, Jun Wang, our Chairman, President and Chief Executive Officer and one of our largest shareholders, beneficially owns 9.43% of our outstanding shares. Mr. Wang possesses significant influence over us, giving him the ability, among other things, to exercise significant control over the election of all or a majority of the Board of Directors and to approve significant corporate transactions. Such stock ownership and control may also have the effect of delaying or preventing a future change in control, impeding a merger, consolidation, takeover or other business combination, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company. Without the consent of Mr. Wang, we could be prevented from entering into potentially beneficial transactions if they conflict with his interests. The interests of Mr. Wang may differ from the interests of our other shareholders.

Provisions in the Nevada Revised Statutes and our Articles of Incorporation and Amended and Restated Bylaws could make it very difficult for you to bring any legal actions against our directors or officers for violations of their fiduciary duties or could require us to pay any amounts incurred by our directors or officers in any such actions.

Members of our Board of Directors and our officers will have no liability for breaches of their fiduciary duty of care as a director or officer, except in limited circumstances, pursuant to provisions in the Nevada Revised Statutes and our Articles of Incorporation and Amended and Restated Bylaws as authorized by the Nevada Revised Statutes. Specifically, Section 78.138 of the Nevada Revised Statutes provides that a director or officer is not individually liable to the company or its shareholders or creditors for any damages as a result of any act or failure to act in his or her

capacity as a director or officer unless it is proven that (1) the director's or officer's act or failure to act constituted a breach of his or her fiduciary duties as a director or officer and (2) his or her breach of those duties involved intentional misconduct, fraud or a knowing violation of law. This provision is intended to afford directors and officers protection against and to limit their potential liability for monetary damages resulting from suits alleging a breach of the duty of care by a director or officer. Accordingly, you may be unable to prevail in a legal action against our directors or officers even if they have breached their fiduciary duty of care. In addition, our Amended and Restated Bylaws allow us to indemnify our directors and officers from and against any and all costs, charges and expenses resulting from their acting in such capacities with us. This means that if you were able to enforce an action against our directors or officers, in all likelihood, we would be required to pay any expenses they incurred in defending the lawsuit and any judgment or settlement they otherwise would be required to pay. Accordingly, our indemnification obligations could divert needed financial resources and may adversely affect our business, financial condition, results of operations and cash flows, and adversely affect prevailing market prices for our common stock.



Table of Contents

Item 1B. Unresolved Staff Comments

Not required.

Item 2. Properties

Our headquarters and principal manufacturing facilities are located in the Shenyang Economic and Technological Development Zone, Shenyang City, Liaoning Province, PRC. We acquired land use rights in Shenyang by the municipal administration of state-owned land through 2055, on which we own two buildings, including our office headquarters and principal manufacturing facilities. Siping Beifang owns its manufacturing facilities and land use rights for three parcels of land in Siping through 2052, 2056 and 2060, respectively. SmartHeat Energy acquired land use rights in Shenyang that are valid through 2060. We temporarily halted construction on a factory project for SmartHeat Energy because we believe that economic and market conditions in China at this time make it unlikely for the factory to operate profitably if completed in 2012 as originally scheduled. SanDeKe, Ruicheng and SmartHeat Pump lease space for their business offices and manufacturing facilities. SmartHeat Germany owns manufacturing facilities and land in Güstrow, Germany. We have leased offices for our sales representatives in multiple PRC cities under short-term, renewable leases.

In general, our properties are well maintained, considered adequate and being utilized for their intended purposes. See Notes 5, 7, 8 and 17 to our consolidated financial statements contained herein, which disclose amounts invested in land use rights, buildings, machinery, equipment and lease agreements.

Item 3. Legal Proceedings

We may become involved in various lawsuits and legal proceedings arising in the ordinary course of business. Litigation is subject to inherent uncertainties and an adverse result in these or other matters may arise from time to time that may have an adverse effect on our business, financial conditions or operating results. We are currently not aware of any such legal proceedings or claims that will have, individually or in the aggregate, a material adverse effect on our business, financial condition or operating results.

Item 4. Mine Safety Disclosures

Not applicable.

Table of Contents

## PART II

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

## Market Information

Our common stock is listed on the NASDAQ Global Select Market under the symbol "HEAT" and has been trading on NASDAQ since January 29, 2009. The following table sets forth the range of the high and low sales prices of our common stock as reported by NASDAQ for each quarter in the years ended December 31, 2011 and 2010. All prices have been adjusted to reflect the one-for-ten reverse stock split of our common stock effective as of February 7, 2012.

	2011		2010	
	High	Low	High	Low
First Quarter (through March 31)	\$54.90	\$27.50	\$186.00	\$102.10
Second Quarter (through June 30)	36.30	10.80	109.30	53.20
Third Quarter (through September 30)	19.90	6.50	73.90	51.10
Fourth Quarter (through December 31)	7.50	2.90	81.10	42.20

## Holders of Record

On March 28, 2012, there were approximately 42 shareholders of record based on information provided by our transfer agent. Many of our shares of common stock are held in street or nominee name by brokers and other institutions on behalf of shareholders and we are unable to estimate the total number of shareholders represented by these record holders.

## Dividend Policy

We have not paid and do not expect to declare or pay any cash dividends on our common stock in the foreseeable future, and we currently intend to retain future earnings, if any, to finance the expansion of our business. The decision whether to pay cash dividends on our common stock will be made by our Board of Directors, in their discretion, and will depend on our financial condition, operating results, capital requirements and other factors deemed relevant by our Board of Directors.

Our ability to pay dividends may be affected by the complex currency and capital transfer regulations in China that restrict the payment of dividends to us by our subsidiaries in China. PRC regulations currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. Our subsidiaries in China also are required to set aside at least 10% of net income after taxes based on PRC accounting standards each year to statutory surplus reserves until the cumulative amount of such reserves reaches 50% of registered capital. These reserves are not distributable as cash dividends. Our subsidiaries in China also may allocate a portion of their after-tax profits to their staff welfare and bonus funds, which may not be distributed to equity owners except in the event of liquidation. If any of our subsidiaries incur debt, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us.

In addition, Circular 75 requires PRC residents, including both legal persons and natural persons, to register with the competent local SAFE branch before establishing or controlling any company outside of China. If the PRC subsidiaries of an offshore parent company do not report the need for their PRC investors to register to the local SAFE authorities, they may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to their offshore parent company. Although we believe that our subsidiaries in China are in

compliance with these regulations, should these regulations or the interpretation of them by PRC courts or regulatory agencies change, we may not be able to pay dividends outside of China.

Table of Contents

Item 6. Selected Financial Data

Not required.

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

Safe Harbor Declaration

The comments made throughout this Annual Report should be read in conjunction with our Financial Statements and the Notes thereto, and other financial information appearing elsewhere in this document. In addition to historical information, the following discussion and other parts of this document contain certain forward-looking information. When used in this discussion, the words, "believes," "anticipates," "expects" and similar expressions are intended to identify forward-looking statements. Such statements are subject to certain risks and uncertainties, which could cause actual results to differ materially from projected results, due to a number of factors beyond our control. We do not undertake to publicly update or revise any of its forward-looking statements, even if experience or future changes show that the indicated results or events will not be realized. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Readers are also urged to carefully review and consider our discussions regarding the various factors that affect our business, which are described in this section and elsewhere in this report.

Overview

We are a designer, manufacturer and seller of clean technology plate heat exchangers and related systems marketed principally in the PRC. Our products are used in the industrial, residential and commercial markets to improve energy utilization and efficiencies, and to reduce pollution by reducing the need for coal-fired boilers. We design, manufacture, sell and service PHEs, PHE Units, which combine PHEs with various pumps, temperature sensors, valves and automated control systems in systems custom designed by our own in-house engineers, heat meters and heat pumps for use in commercial and residential buildings. We also design, manufacture and sell spiral heat exchangers and tube heat exchangers. Our products and systems are an increasingly important element in providing a clean technology, mission-critical solution to energy consumption and air pollution problems in China and are commonly used in a wide variety of industrial processes where heat transfer is required. Common applications include energy conversion for HVAC and industrial use in petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. We sell our products under our SmartHeat and Taiyu brand names and also sell PHEs under the Sondex brand name as an authorized dealer of Sondex PHEs in China.

We are a U.S. holding company with no material assets other than the ownership interests of our subsidiaries through which we design, manufacture and sell our clean technology PHEs and related systems. We were incorporated in the State of Nevada on August 4, 2006, under the name Pacific Goldrim Resources, Inc., as an exploration stage corporation with minimal operations to engage in the exploration for silver, lead and zinc. On April 14, 2008, we changed our name to SmartHeat Inc. and entered into the Share Exchange Agreement to acquire Taiyu, a privately held Sino-foreign joint venture company formed under the laws of the PRC on July 24, 2002, and engaged in the design, manufacture, sale and servicing of plate heat exchange products in China. We received PRC government approval on May 28, 2008, of our subscription for 71.6% of the registered capital of Taiyu, and approval on June 3, 2009, of the transfer of the remaining 28.4% ownership of Taiyu from the original joint venture shareholders who had received shares of our common stock in the Share Exchange. As a result of the Share Exchange Agreement and subsequent transactions contemplated thereby, and receipt of the above PRC government approvals, Taiyu became our WFOE.



## Table of Contents

As an expansion of our business following our acquisition of Taiyu, we acquired and established strategic subsidiaries in China and Germany. On September 25, 2008, we acquired SanDeKe, a Shanghai-based manufacturer of PHEs. On June 16, 2009, we completed an asset purchase transaction with Siping Beifang to set up a new manufacturing facility under our newly incorporated subsidiary, SmartHeat Siping. On August 14, 2009, we formed Jinhui, a joint venture in Beijing of which we own 52%, to provide consulting services and expand our sales of PHEs into new industries and regions of China. On April 7, 2010, we formed SmartHeat Investment as an investment holding company in Shenyang for our investment in and establishment of new companies and businesses in China. On April 12, 2010, SmartHeat Investment formed SmartHeat Energy as its wholly owned subsidiary for the research, development, manufacturing and sales of energy products. On May 6, 2010, we formed SmartHeat Trading through a nominee, Cleantech Holdings, to market and expand sales of our branded products in China. Prior to November 9, 2011, we had no direct ownership interest in SmartHeat Trading; instead, we controlled and were entitled to 100% of the profit or loss of SmartHeat Trading under contractual arrangements. Effective as of November 9, 2011, we terminated the nominee-owner relationship and acquired direct control over SmartHeat Trading. On December 2, 2010, we formed Ruicheng, a joint venture in Hohhot City, China, for the design and manufacture of heat meters, of which we acquired 51% of the equity interest on January 7, 2011. On March 1, 2011, we entered into a purchase agreement to acquire 95% of the equity interests in SmartHeat Pump, a Shenyang-based state-owned heat pump manufacturer and designer. On March 3, 2011, we completed the acquisition of SmartHeat Germany, a designer and manufacturer of high efficiency heat pumps in Germany, to extend our clean technology heating solutions into the rapidly growing heat pump markets in Europe and China.

### Principal Factors Affecting Our Financial Performance

Our revenues are subject to fluctuations due to the timing of sales of high-value products, the impact of seasonal spending patterns, the timing and size of projects our customers perform, changes in overall spending levels in the industry, changes in PRC government fiscal policies, inflation in China and other unpredictable factors that may affect customer ordering patterns. Our revenues may fluctuate due to the seasonal nature of central heating services in the PRC because the equipment used in residential buildings must be delivered and installed prior to the beginning of the heating season in late fall, which occurs during the third and fourth calendar quarters in China. Additionally, any significant delays in the commercial launch or any lack or delay of commercial acceptance of new products, unfavorable sales trends in existing product lines or impacts from the other factors mentioned above, could adversely affect our revenue growth or cause a sequential decline in quarterly revenue.

In response to inflationary concerns, the PRC government tightened fiscal policies in 2011 that contributed to a general slowdown in many sectors of China's economy and restricted bank lending practices. Historically, approximately 40% of our customers, representing the majority of our total sales, consist of state-owned enterprises in China. Many of these customers, the majority of which are real estate developers, encountered difficulties in 2011 in obtaining grants from the PRC government and faced an extended bank loan application process, both of which typically are used to finance the purchase of our products. Accordingly, the deflationary policy of the PRC government affected the number of new sales of our PHEs and PHE Units as certain state-owned enterprises deferred bidding for new projects in 2011 because of their working capital difficulties or abandoned existing projects. The decline in new projects among state-owned enterprises and increased peer competition contributed to a decline in sales of our PHEs and PHE Units in 2011. We also canceled contracts with certain of these state-owned customers that were unable to make payments or that had requested adjustments to their payment terms in response to their financial difficulties. Although these events caused a decrease in our sales in 2011, we expect that a portion of the canceled PHE and PHE Unit orders will be reinstated and contracts that have been partially delayed will be performed in 2012, reducing the impact of the drop in our sales over the long term.

Our revenues also may fluctuate significantly due to material costs, which normally account for approximately 80% of our cost of sales. We experienced and anticipate continued fluctuation in raw material costs as a result of world

economic conditions, such as the price of stainless steel used to produce plates for our PHEs and PHE Units. We monitor the commodities markets for pricing trends and changes, but we do not engage in hedging to protect against raw material fluctuations. Instead, we attempt to mitigate the short-term risks of price swings by purchasing raw materials in advance based on production needs and projected sales. We typically experience stronger sales during the second half of the year, which is the start of fall and winter in China, during which we historically generate the majority of our revenue. Accordingly, we increased our inventory and advances to suppliers during the first three quarters of 2011 in anticipation of our historical high season for production. Management believes that our current levels of increased inventory resulting from the unexpected abandonment of projects and cancellation of orders by certain customers in 2011 will be consumed gradually through the first half of 2012 as we fulfill delayed and reinstated contracts. Although we currently are able to obtain adequate supplies of raw materials, it is impossible to predict future availability or cost. Unfavorable fluctuations in the price, quality or availability of required raw materials could negatively affect our cash flows and ability to meet the demands of our customers, which could result in the loss of future sales.

## Table of Contents

Our profitability generally depends upon the margin between the cost to us of certain goods used in the manufacturing process, such as plates, pumps, water tanks, sensors, controlling systems and other raw materials, as well as our fabrication costs associated with converting such goods and raw materials compared to the selling price of our products, and the overall supply of raw materials. It is our intention to base the selling prices of our products upon the associated raw materials costs to us, which typically make up approximately 80% of total cost. We may not be able to pass all increases in raw material costs and ancillary acquisition costs associated with taking possession of raw materials through to our customers, however, and there may be a time lag as we bid on new projects and renegotiate pricing with our existing customers. Furthermore, to ease inflationary pressure on our costs, we implemented new controls over our purchasing process and raw material pricing by adopting a new budgetary control system to monitor our fixed costs and continued improvements to our manufacturing process to decrease labor cost and improve manufacturing efficiency.

### Significant Accounting Policies

While our significant accounting policies are more fully described in Note 2 to our consolidated financial statements, we believe the following accounting policies are the most critical to aid you in fully understanding and evaluating this management discussion and analysis.

### Basis of Presentation

Our financial statements are prepared in accordance with U.S. GAAP.

### Principle of Consolidation

The accompanying consolidated financial statements include the accounts of SmartHeat's U.S. parent and its subsidiaries, Taiyu, SanDeKe, SmartHeat Siping, Jinhui, SmartHeat Investment, SmartHeat Energy, SmartHeat Trading, Ruicheng, SmartHeat Germany and SmartHeat Pump. All significant inter-company accounts and transactions were eliminated in consolidation.

### Use of Estimates

In preparing the financial statements in conformity with U.S. GAAP, management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the dates of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Significant estimates, required by management, include the recoverability of long-lived assets, allowance for doubtful accounts, and the reserve for obsolete and slow-moving inventories. Actual results could differ from those estimates.

### Accounts Receivable

Our policy is to maintain reserves for potential credit losses on accounts receivable. Management reviews the composition of accounts receivable and analyzes historical bad debts, customer concentrations, customer credit worthiness, current economic trends and changes in customer payment patterns to evaluate the adequacy of these reserves. Accounts receivable are net of unearned interest. Unearned interest represents imputed interest on accounts receivable with due dates over one year from the invoice date discounted at our borrowing rate for the year.



## Table of Contents

### Impairment of Long-Lived Assets

We assess the impairment of long-lived assets, which include tangible assets, such as property, plant and equipment, goodwill and other intangible assets, whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such circumstances are determined to exist, an estimate of undiscounted future cash flows expected to be generated by the long-lived assets, or the appropriate grouping of assets, is compared to the carrying value to determine whether an impairment exists. If an asset is determined to be impaired, the loss is measured based on fair value, generally determined using the asset's expected future discounted cash flows or market value, if readily determinable. The following are indicators management considers in determining whether it is necessary to test assets for impairment in accordance with ASC 360-10-35-21:

- Significant decrease in the market price of a long-lived asset or asset group;
- Significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition;
- Significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset or asset group, including an adverse action or assessment by a regulator;
- Accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset or asset group;
- Current-period operating or cash flow loss combined with a history of operating or cash flow losses, or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset or asset group; and
- Current expectation that, more likely than not, a long-lived asset or asset group will be sold or otherwise disposed of significantly before the end of its previously estimated useful life.

We evaluate goodwill and intangible assets with indefinite lives for impairment annually using a two-step approach. Based on this valuation approach, we concluded that the entire goodwill balance of \$6.06 million for SmartHeat Pump and \$2.90 million of the SmartHeat Germany goodwill balance was impaired as of December 31, 2011.

### Revenue Recognition

Our revenue recognition policies are in compliance with SEC Staff Accounting Bulletin ("SAB") 104 (codified in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 605). Sales revenue is recognized when PHEs, heat meters and heat pumps are delivered, and for PHE Units when customer acceptance occurs, the price is fixed or determinable, no other significant obligations of ours exist and collectibility is reasonably assured. Payments received before all of the relevant criteria for revenue recognition are recorded as unearned revenue under "Advance from customers."

Our agreements with our customers generally provide that 30% of the purchase price is due upon placement of an order, 30% upon delivery and 30% upon installation and acceptance of the equipment after customer testing. As a common practice in the heating manufacturing business in China, payment of the final 10% of the purchase price is due no later than the termination date of the standard warranty period, which ranges from 3 to 24 months from the acceptance date.

Our standard warranty is provided to all customers and is not considered an additional service; rather, it is an integral part of the product sale. We believe the existence of the standard product warranty in a sales contract does not constitute a deliverable in the arrangement and thus there is no need to apply the EITF 00-21 (codified in FASB ASC Topic 605-25) separation and allocation model for a multiple deliverable arrangement. SFAS 5 (codified in FASB ASC Topic 450) specifically addresses the accounting for standard warranties and neither SAB 104 nor EITF 00-21 supersedes SFAS 5. We believe accounting for our standard warranty pursuant to SFAS 5 does not impact revenue recognition because the cost of honoring the warranty can be reliably estimated.

We charge for after-sales services provided after the expiration of the warranty period, with after-sales services mainly consisting of cleaning PHEs and repairing and exchanging parts. We recognize such revenue when service is provided. The revenue earned from these services was not material.

## Table of Contents

### Foreign Currency Translation and Comprehensive Income (Loss)

The functional currency of our subsidiaries in China is RMB. The functional currency of SmartHeat Germany, our German subsidiary, is EUR. For financial reporting purposes, RMB and EUR were translated into USD as the reporting currency. Assets and liabilities are translated at the exchange rate in effect at the balance sheet date. Revenues and expenses are translated at the average rate of exchange prevailing during the reporting period. Translation adjustments arising from the use of different exchange rates from period to period are included as a component of stockholders' equity as "Accumulated other comprehensive income." Gains and losses resulting from foreign currency transactions are included in income. There was no significant fluctuation in exchange rate for the conversion of RMB to USD after the balance sheet date.

We use Statement of Financial Accounting Standards ("SFAS") No. 130, "Reporting Comprehensive Income" (codified in FASB ASC Topic 220). Comprehensive income is comprised of net income and all changes to the statements of stockholders' equity, except those due to investments by shareholders, changes in paid-in capital and distributions to shareholders.

### Recent Accounting Pronouncements

In September 2011, FASB issued ASU 2011-08, "Testing Goodwill for Impairment." ASU 2011-08 will allow companies to assess qualitative factors to determine if it is more-likely-than-not that goodwill might be impaired and whether it is necessary to perform the two-step goodwill impairment test required under current accounting standards. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for annual reporting periods beginning after December 15, 2011, with early adoption permitted. The adoption of this ASU did not have a material impact on our consolidated financial statements.

In June 2011, FASB issued ASU 2011-05, "Comprehensive Income: Presentation of Comprehensive Income." ASU 2011-05 requires companies to present the components of net income and other comprehensive income either as one continuous statement or as two consecutive statements. ASU 2011-05 eliminates the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity. ASU 2011-05 does not change the items that must be reported in other comprehensive income, how such items are measured or when they must be reclassified to net income. ASU 2011-05 will be effective for the first interim and annual periods beginning after December 15, 2011. Further, in December 2011, the FASB issued ASU 2011-12, "Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05." We believe the adoption of this guidance concerns disclosure only and will not have a material impact on our consolidated financial statements.

In May 2011, FASB issued ASU 2011-04, "Fair Value Measurement: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." ASU 2011-04 changes the wording used to describe the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements in order to improve consistency in the application and description of fair value between U.S. GAAP and International Financial Reporting Standards ("IFRS"). ASU 2011-04 clarifies how the concepts of highest and best use and valuation premise in a fair value measurement are relevant only when measuring the fair value of nonfinancial assets and are not relevant when measuring the fair value of financial assets or of liabilities. In addition, ASU 2011-04 expanded the disclosures for the unobservable inputs for Level 3 fair value measurements, requiring quantitative information to be disclosed related to (1) the valuation processes used, (2) the sensitivity of the fair value measurement to changes in unobservable inputs and the interrelationships between those unobservable inputs and (3) use of a nonfinancial asset in a way that differs from the asset's highest and best use. ASU 2011-04 will be effective for the first interim and annual reporting periods beginning after December 15, 2011 and early adoption is prohibited. We currently are evaluating the future impact of this new accounting update on our consolidated financial

statements.

32

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Table of Contents

## Results of Operations

Year Ended December 31, 2011, Compared to the Year Ended December 31, 2010

The following table sets forth the results of our operations for the years indicated as a percentage of net sales:

	2011		2010	
	\$	% of Sales	\$	% of Sales
Sales	\$ 65,221,104		\$ 125,406,862	
Cost of sales	44,559,093	68%	80,694,945	64%
Gross profit	20,662,011	32%	44,711,917	36%
Operating expenses	43,638,150	67%	18,020,877	14%
Income (loss) from operations	(22,976,139)	(35)%	26,691,040	22%
Other income (expenses), net	(1,265,921)	(2)%	460,702	0.4%
Income tax expense	186,373	-%	4,533,112	4%
Noncontrolling interest	(468,247)	(1)%	(79,813)	(0.1)%
Net income (loss) to SmartHeat Inc.	\$ (23,960,186)	(37)%	\$ 22,698,443	18%

Sales. Net sales in 2011 were \$65.22 million, consisting of \$32.59 million for PHEs, \$23.42 million for PHE Units, \$6.54 million for heat meters and \$2.67 million for heat pumps, while net sales in 2010 were \$125.41 million, consisting of \$60.22 million for PHEs, \$55.44 million for PHE Units and \$9.75 million for heat meters, an overall decrease of \$60.19 million or 48%. The decrease in sales was due primarily to a 45% decrease in sales volume in 2011 compared to 2010. Sales volume of PHEs, PHE Units and heat meters decreased 43%, 47% and 46%, respectively, in 2011 compared to 2010. We began sales of heat pumps in 2011. The decrease in sales volume resulted from tightened fiscal policy in China, which has contributed to a general slowdown in many sectors of China's economy, restricted bank lending practices and caused the abandonment of certain projects by our customers. Many of our customers are state-owned real estate developers that encountered difficulties in obtaining grants and loans typically used to finance the purchase of our products, which resulted in an unexpected cancellation of orders and delays in the performance of PHE and PHE Unit contracts. In addition, we re-evaluated the credit and payment history of our customers and determined to give up certain customers based on our review. Although these events caused a decrease in our sales in 2011, we expect that a portion of the canceled PHE and PHE Unit orders will be reinstated and contracts that have been partially delayed will be performed in 2012, reducing the impact of the drop in our sales over the long term.

We have a review process for approving each sales contract, especially with respect to sales price. Sales price is determined under each contract in proportion to our estimated cost in order to ensure our gross profit. Our sales price varies according to each sale depending mainly on each customer's specific requirements and our negotiation of the contract amount and term. We believe our marketing policy remains successful and have maintained the same program as last year, but we adjusted our pricing policy in 2011 in order to obtain more contracts. The decrease of average selling price, in addition to decreased sales volume, resulted in a decrease of sales across product lines in 2011 compared to 2010.

Table of Contents

**Cost of Sales.** Cost of sales was \$44.56 million in 2011 compared to \$80.69 million in 2010, a decrease of \$36.14 million or 45%. Cost of sales mainly consisted of the cost of materials and labor, as well as factory overhead. Materials cost is normally 82% of total cost, while factory overhead cost is about 16% and labor is about 3%. The decrease in cost of sales is attributable to the decrease in production and sales volume in 2011. Cost of sales as a percentage of sales increased 4% to 68% in 2011 compared to 64% in 2010. The slight increase in cost of sales as a percentage of sales was due to overall inflation in China, which resulted in a 3% price increase of our raw material purchases and a nearly 10% increase of labor cost. Also, due to significant decreased production volume, the overhead cost absorbed by individual products increased in 2011 compared to 2010. The gross profit margin of SmartHeat Pump, our subsidiary acquired in March 2011, was break-even due to low production, high research and development expense and adjusted marketing strategy. In order to ease the pressure from inflation, we implemented new controls over our purchasing process and raw material pricing by adopting a new budgetary control system to monitor our fixed costs and continued improvements to our manufacturing process to decrease labor cost and improve manufacturing efficiency.

**Gross Profit.** Gross profit was \$20.66 million in 2011 compared to \$44.71 million in 2010, or gross profit margins of 32% and 36%, respectively. The decreased gross profit was due primarily to inflation-related increases to our production costs, including increased prices for raw materials, increased labor cost and decreased production volume. Our newly acquired subsidiaries also contributed to the decrease in gross profit in 2011, as SmartHeat Pump has relatively low gross profit and we continue to integrate SmartHeat Germany, which resulted in unfavorable operating outcome in 2011.

**Operating Expenses.** Operating expenses consisting of selling, general and administrative expenses totaled \$43.64 million in 2011 compared to \$18.02 million in 2010, an increase of \$25.39 million or 142%. Operating expenses as a percentage of sales were 67% in 2011 compared to 14% in 2010. The increase in operating expenses mainly resulted from goodwill impairment of \$8.96 million, increased bad debt allowance of \$7.64 million, increased inventory provision of \$3.73 million and expansion of our business, which included additional costs of hiring more sales personnel, higher depreciation expense, training our marketing team and establishing new sales offices in more regions of China.

We recorded a bad debt allowance of \$7.64 million for 2011, primarily attributed to payment delays caused by the working capital difficulties of many of our state-owned customers. Due to the deflationary fiscal policy of the PRC government in 2011, some of our state-owned customers encountered difficulties in obtaining grants from the government and loans from state-owned banks, both of which typically are used to finance the purchase of our products, which resulted in unexpected delays in paying our accounts receivable in a timely manner. Generally, we account for 50% of the amount of accounts receivable with aging over 180 days and 100% of the amount of accounts receivable with aging over 360 days as bad debt allowance. We do not expect a significant risk with respect to the overdue accounts receivable for which we took the bad debt allowance and believe that a substantial portion of the bad debt will be repaid as the PRC government restores grants and credit policies. We believe the stringent fiscal policy impacting our customers in China will be temporary and the expansion and training of our marketing team and other employees to date will increase sales and improve the efficiency of our operations. Nevertheless, we will institute a rigorous program of cost cutting to continue to tightly control our budget and implement additional cost control measures, including a review of the staffing levels of our employees in response to the decrease in revenue.

We performed annual goodwill impairment assessment for SmartHeat Germany and SmartHeat Pump as of December 31, 2011. The goodwill balance prior to the impairment charge was \$10.97 million and was established primarily as a result of the acquisition of SmartHeat Germany and SmartHeat Pump in 2011. We completed the step one analysis using discounted cash flow. The discounted cash flow method uses revenue and expense projections and risk-adjusted discount rates. The process of determining fair value is subjective and requires management to exercise a significant amount of judgment in determining future growth rates, discount and tax rates and other factors. The current economic

environment has impacted our ability to forecast future demand and has in turn resulted in the use of higher discount rates, reflecting the risk and uncertainty in current markets. The results of the step one analysis indicated potential impairment in the SmartHeat Germany and SmartHeat Pump reporting units, corroborated by a combination of factors including a significant and sustained decline in the market capitalization, which is significantly below the book value, and the deteriorating macro environment, which resulted in a decline in expected future demand. We therefore performed the second step of the goodwill impairment assessment to quantify the amount of impairment. This process involved calculating the implied fair value of goodwill, determined in a manner similar to a purchase price allocation, and comparing the residual amount to the carrying amount of goodwill. Our analysis incorporated the declining market capitalization in 2011 and the significant end market deterioration and economic uncertainties impacting expected future demand, including the continued tightened fiscal policy in China and difficulties in obtaining bank leasing loans that have contributed to a general slowdown in many sectors of China's economy and caused the abandonment of certain projects by our customers, which in turn resulted in an unexpected cancelation of orders and delays in the performance of PHE and PHE Unit contracts. We concluded that the entire goodwill balance of \$6.06 million for SmartHeat Pump and \$2.90 million of the SmartHeat Germany goodwill balance was impaired as of December 31, 2011. The goodwill impairment charge is non-cash in nature and not deductible for income tax purposes. Although we wrote off goodwill in 2011 based on the current economic environments in China and Europe and our near-term assessment of the cash flows of these acquisitions, we anticipate growth in the heat pump markets in the future and are continuing their operations, viewing these acquisitions as providing value and increased sales over the long term.

Table of Contents

We performed an inventory impairment assessment as of December 31, 2011, for the write-down of raw materials and finished goods in inventory. We stock inventory, consisting of raw materials and finished goods, according to projected sales and customer orders, with steel, plates and components for our products generally ordered two to three months in advance of anticipated production needs. During the first three quarters of 2011, we determined that no write-down of raw materials was required because raw materials in inventory consisted primarily of steel, for which the possibilities of becoming obsolete are very remote. The temporary financial difficulties encountered by certain of our customers in 2011 resulted in unexpected delays and abandonment of planned projects, cancelation of anticipated orders and delays in the performance of existing contracts associated with such projects. We believed that a portion of these contracts would be reinstated and performed in 2011 or 2012, and did not receive firm contract cancelations of existing contracts until the end of the third quarter in 2011. Accordingly, we performed an impairment assessment of our inventory at fiscal year-end rather than during the interim periods. As part of our impairment analysis, we performed an evaluation of raw materials stored over one year and not anticipated to be consumed, and an evaluation of potential impairment to the quality of these raw materials. If management anticipates that obsolete raw materials in inventory can be utilized and will be consumed within the next six months through new customer orders or substitute orders, no impairment is recorded. We collected information about delayed and canceled contracts and met with the affected customers to discuss their financing situation and projections of future orders. Finished goods manufactured for delayed and canceled contracts that we do not expect to be reinstated and contracts for which we have been unable to find substitute customers become impaired. We performed an evaluation of these finished goods stored over one year and recorded an impairment accordingly. We believe that a portion of the canceled orders from 2011 for PHEs and PHE Units will be reinstated and contracts that have been partially delayed will be performed in 2012, gradually consuming our increased levels of finished goods in inventory otherwise requiring impairment. We also made an analysis of whether to take a reserve for conversion costs of finished goods in inventory for resale to substitute customers. Following the completion of our impairment analysis, we recorded provision of inventory impairment of \$3.73 million for 2011.

As part of our strategy to expand market share in China, consolidate management and reduce reliance on our current state-owned customers that have encountered financial difficulties in 2011, we increased sales personnel and management. This strategy includes the opening of additional branch offices and centralizing management over sales and marketing across subsidiaries, which increased costs for personnel, training and rent in 2011. We hired more employees in 2011, resulting in increased employee compensation and employee welfare and benefit expenses of \$1.19 million. Our after-sales service cost increased \$0.08 million, rental expenses increased \$0.07 million and new plant expenses increased \$0.35 million in 2011 compared to 2010. Our legal, audit and related expenses were approximately \$0.66 million in 2011 in connection with our March 2011 acquisitions of SmartHeat Germany and SmartHeat Pump. In addition, we canceled certain contracts with some of our state-owned customers that have experienced financial difficulties attributed to the current deflationary policy in China.

Other income (expenses), net. Our other expense for 2011 was \$1,265,921 compared to net other income of \$460,702 for 2010, a decrease of \$1,726,623 or 375%. The decrease was due mainly to increased interest expenses of \$0.79 million from increased short-term loans and increased foreign exchange transaction loss of \$0.44 million.

Income tax expense (benefit). We had income tax expense of \$186,373 for 2011 compared to \$4.53 million for 2010. The effective income tax rate for 2011 was 0.77% compared to 16.7% for 2010 as a result of our loss in 2011.

Taiyu and SanDeKe are governed by the Income Tax Law of the PRC concerning privately-run enterprises, which are generally subject to tax at a statutory rate of 25% on income reported in the statutory financial statements after appropriated tax adjustments. According to the new income tax law that became effective January 1, 2008, new high-tech enterprises given special support by the PRC government are subject to an income tax rate of 15%. Taiyu has been classified as a high-tech enterprise since 2009 and eligible for an income tax rate of 15% until 2012. The local PRC government reviews the high-tech status of such enterprises annually. SanDeKe is exempt from income tax



for two years starting from its first profitable year and is entitled to a 50% discount on its income tax rate from 2010 through 2012. The income tax rate for SanDeKe is 12% and 11% for 2011 and 2010, respectively.

SmartHeat Siping, Jinhui, SmartHeat Investment, SmartHeat Energy, SmartHeat Pump, Ruicheng and SmartHeat Trading are subject to the regular 25% PRC income tax rate. SmartHeat Germany is subject to a 15% corporate income tax in Germany.

Net Income (Loss). Our net loss for 2011 was \$23.96 million compared to net income of \$22.70 million for 2010, a decrease of \$46.66 million or 206%. Net loss as a percentage of sales was 37% in 2011 and net income as a percentage of sales was 18% in 2010. This decrease in net income was attributable to decreased net sales and increased bad debt allowance, goodwill impairment, inventory provision reserve and other operating expenses.

Table of Contents

## Liquidity and Capital Resources

On November 23, 2010, we closed a public offering of 574,081 shares of our common stock at \$50.00 per share, which includes 74,081 shares sold as a result of the underwriters exercising their over-allotment option. After underwriting discounts and commissions and related expenses, we received net proceeds of \$27,040,741.

As of December 31, 2011, we had cash and equivalents of \$12.42 million. Working capital was \$109.11 million at December 31, 2011. The ratio of current assets to current liabilities was 3.99:1 at December 31, 2011.

The following is a summary of cash provided by or used in each of the indicated types of activities during 2011 and 2010:

	2011	2010
Cash provided by (used in):		
Operating activities	\$ (32,264,320)	\$ (9,132,763)
Investing activities	\$ (17,491,608)	\$ (13,346,876)
Financing activities	\$ 4,013,342	\$ 29,440,883

Net cash flow used in operating activities was \$32.26 million in 2011 compared to net cash flow used in operating activities of \$9.13 million in 2010. The increase in net cash outflow in operating activities was due mainly to decreased net income, increased payment of advance to suppliers, inventory and payment made for other receivables and deposits. We typically experience significantly stronger sales during the second half of the calendar year, which is the fall and winter season in China, during which we historically generate approximately 77% of our sales. Accordingly, we increased inventory and advances to suppliers in 2011 in advance of anticipated production needs. Our inventory of finished goods increased in 2011 due to unexpected cancelations and delays of certain projects by our customers resulting from the tightened fiscal policies in China. We performed an inventory impairment analysis as of December 31, 2011, of slow-moving and customized inventory for which the order was canceled or delayed, and recorded \$3.73 million inventory impairment allowance.

Net cash flow used in investing activities was \$17.49 million in 2011 compared to net cash used in investing activities of \$13.35 million in 2010. The increase of net cash flow used in investing activities was due mainly to the acquisition of SmartHeat Pump and SmartHeat Germany for \$13.52 million, purchase of property and equipment of \$2.61 million, purchase of intangible asset of \$0.15 million, \$0.57 million advance to supplier for equipment, \$0.43 million on construction in progress and increased restricted cash of \$0.31 million, partially offset by cash acquired from acquisition of \$0.43 million and proceeds from fixed assets disposal of \$39,665. In 2010, we paid \$10.12 million for purchase of land use right, \$1.11 million for purchase of machinery and equipment, \$0.50 million advance to supplier for equipment, \$79,444 on construction in progress, and increased restricted cash by \$1.04 million.

Net cash flow provided by financing activities was \$4.01 million in 2011 compared to net cash provided by financing activities of \$29.44 million in 2010. The cash inflow in 2011 consisted primarily of proceeds from a short-term loan of \$8.83 million, long-term payable of \$2.01 million, capital contribution from noncontrolling interest of \$0.76 million and increased notes payable of \$0.93 million, partially offset by repayment on a short-term loan of \$8.52 million. In 2010, we had \$27.04 million from issuance of common stock and \$4.43 million from a short-term loan, but repaid \$2.12 million on notes payable.

## Table of Contents

Our agreements with our customers generally provide that 30% of the purchase price is due upon the placement of an order, 30% upon delivery and 30% upon installation and acceptance of the equipment after customer testing. As a common practice in the heating manufacturing business in China, payment of the final 10% of the purchase price is due no later than the termination date of the standard warranty period, which ranges from 3 to 24 months from the acceptance date, or up to 2 heating seasons. Our receipts for payment on our products depend on the complexity of the equipment ordered, which impacts manufacturing, delivery, installation, testing times and warranty periods. For example, PHEs are less complex than PHE Units and therefore have a shorter manufacturing, acceptance, warranty and payment schedule. We may experience payment delays from time to time, which historically have been from 1 to 3 months from the due date, but given the temporary financial difficulties in 2011 of some of our state-owned customers resulting from tightened fiscal policies in China, we have experienced longer payment delays from these customers. Our accounts receivable and inventory turnover are relatively low and days sales outstanding ratio relatively high. Consequently, collection on our sales is slow and capital is tied up in inventories, which may result in pressure on cash flows. For 2011, we had accounts receivable turnover of 1.38, with days sales outstanding of 264 and inventory turnover of 1.11. For 2010, we had accounts receivable turnover of 2.98, with days sales outstanding of 123 and inventory turnover of 4.26. The low accounts receivable turnover and high days outstanding in 2011 was due primarily to the temporary financial difficulties of some of our state-owned customers that resulted in delays in their making payments to us. The low inventory turnover rate in 2011 was due to decreased sales volume from our state-owned customers in China having temporary financial difficulties, which resulted in an unexpected cancellation of orders and delays in the performance of PHE and PHE Unit contracts.

As of December 31, 2011, we had accounts receivable of \$61,950,681, of which \$14,656,181 was with aging within 30 days, \$11,868,305 was with aging over 30 days and within 90 days, \$12,146,538 was with aging over 90 days and within 180 days, \$15,225,064 was with aging over 180 days and within 360 days and \$8,054,593 was with aging over 360 days. At December 31, 2011, net accounts receivable was \$47,055,517, or gross accounts receivable of \$61,950,681 less bad debt allowance of \$10,583,147, unearned interest of \$57,828 and total retention receivables of \$4,254,189.

Our accounts receivable typically remain outstanding for a significant period of time based on the standard payment terms with our customers described above. The increase in amount of accounts receivable outstanding for more than 180 days in 2011 was due mainly to payment delays from certain state-owned customers that experienced working capital difficulties in the first half of 2011 because of the current deflationary fiscal policy of the PRC government. We do not expect a significant risk with respect to these overdue accounts receivable. We took the bad debt allowance against some of these customers and believe that a substantial portion of the bad debt will be repaid in 2012 as the PRC government restores grants and credit policies.

We recognize the final 5-10% of the purchase price as a retention receivable, which is due no later than the termination of our warranty period. The deferral of the final payment is a common practice in the heating manufacturing business in China. Sometimes our customers are required to deposit 5-10% of the sales price on high value products, like an assembled heat exchanger unit or the main part of a PHE, into designated bank accounts as restricted cash for securing the payment after such period expires. Based on our historical experience, there have been no defaults on such deferrals. Therefore, we believe the potential risks and uncertainty associated with defaults on such receivables are not material.

## Dividend Distribution

We are a U.S. holding company that conducts substantially all of our business through our wholly owned and other consolidated operating entities in China and Germany. We will rely in part on dividends paid by our subsidiaries in China and Germany for our cash needs, including the funds necessary to pay dividends and other cash distributions to our shareholders, to service any debt we may incur and to pay our operating expenses. The payment of dividends by

entities organized in China is subject to limitations. In particular, PRC regulations currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. Our PRC subsidiaries also are required to set aside at least 10% of their after-tax profit based on PRC accounting standards each year to a statutory surplus reserve fund until the accumulative amount of such reserve reaches 50% of registered capital. These reserves are not distributable as cash dividends. In addition, our PRC subsidiaries, at their discretion, may allocate a portion of their after-tax profit to their staff welfare and bonus fund, which may not be distributed to equity owners except in the event of liquidation. Moreover, if any of our subsidiaries incur debt on its own behalf in the future, the instruments governing the debt may restrict such subsidiary's ability to pay dividends or make other distributions to us. Any limitation on the ability of one of our subsidiaries to distribute dividends and other distributions to us could materially and adversely limit our ability to make investments or acquisitions that could be beneficial to our businesses, pay dividends or otherwise fund and conduct our business.

Table of Contents

## Off-Balance Sheet Arrangements

We have not entered into any other financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as stockholders' equity or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or research and development services with us.

## Contractual Obligations

We were obligated for the following short-term loans as of December 31, 2011 and 2010:

	2011	2010
From a commercial bank in the PRC for RMB 17,000,000 entered into on June 1, 2010. The loan currently bore interest at 5.31% with maturity on June 30, 2011. The loan was guaranteed by a third party. The loan was paid in full when it matured.	\$ -	\$ 2,566,929
From a commercial bank in the PRC for RMB 13,000,000 entered into on August 9, 2010. The loan bore interest at 5.31% with maturity on June 30, 2011. The Company pledged its building and land use rights for this loan. The loan was paid in full when it matured.	-	1,962,946
From a commercial bank in the PRC for RMB 25,000,000 entered into on October 18, 2010. The loan currently bears interest at 7.22% with maturity on October 17, 2011, and was renewed until September 13, 2012. The loan was pledged by bank deposit.	3,967,687	3,774,895
From a commercial bank in the PRC for RMB 5,000,000 entered into on October 19, 2010. The loan bore interest at 6.94% with maturity on October 18, 2011, but was repaid in September 2011. The loan was pledged by bank deposit.	-	754,979
From a commercial bank in the PRC for RMB 10,000,000 entered into on June 27, 2011. The loan currently bears interest at 7.57% with maturity on June 27, 2012. The loan was pledged by bank deposit.	1,587,075	-
From a commercial bank in the PRC for RMB 3,000,000 entered into on June 30, 2011. The loan currently bears interest at 6.63% with maturity on June 29, 2012. The loan was guaranteed by a third party.	476,122	-
From a commercial bank in the PRC for RMB 5,000,000 entered into on July 6, 2011. The loan currently bears interest at 6.63% with maturity on July 5, 2012. The loan was guaranteed by a third party.	793,537	-
From a commercial bank in the PRC for RMB 3,000,000 entered into on July 15, 2011. The loan currently bears interest at 6.89% with maturity on July 14, 2012. The loan was guaranteed by a third party.	476,122	-
From a commercial bank in the PRC for RMB 1,600,000 entered into on August 1, 2011. The loan currently bears interest at 6.89% with maturity on July 31, 2012. The loan was guaranteed by a third party.	253,932	-
From a commercial bank in the PRC for RMB 3,300,000 entered into August 16, 2011. The loan currently bears interest at 6.89% with maturity on August 15, 2012. The loan was guaranteed by a third party.	523,737	-
From a commercial bank in the PRC for RMB 1,100,000 entered into on August 23, 2011. The loan currently bears interest at 6.89% with maturity on August 22, 2012. The loan was guaranteed by a third party.	174,578	-

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From a commercial bank in the PRC for RMB 5,000,000 entered into on September 21, 2011. The loan currently bears interest at 7.22% with maturity on September 20, 2012. The loan was pledged by bank deposit.	793,537	-
From a commercial bank in the PRC for RMB 10,000,000 entered into on November 8, 2011. The loan currently bears interest at 7.872% with maturity on November 2, 2012. The loan was guaranteed by Taiyu.	1,587,075	-
	\$ 10,633,402	\$ 9,059,749

Of the loans listed above that are guaranteed by a third party, the guarantees were provided by the same third party company, the guarantee term is one year and we not required to pay for this guarantee service as we provide the same guarantee service to loans of the third party company in return. As of December 31, 2011, we have signed a contract to provide guarantees of up to RMB 30 million (\$4.8 million) in loans for this third party company.

On December 12, 2011, we entered into a long-term loan agreement with a commercial bank for RMB 13,000,000 (\$2.06 million), bearing interest of 6.65%, with a maturity date of October 26, 2013. The loan was pledged with building and land.

Table of Contents

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Not required.

Item 8. Financial Statements and Supplementary Data

Our financial statements, together with the report thereon, appear in a separate section of this Annual Report beginning on page F-1.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, our principal executive officer and principal financial officer, respectively, evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of the end of the period covered by this report. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2011, our disclosure controls and procedures were not effective as of such date because of the material weakness identified in our internal control over financial reporting identified below. Notwithstanding this material weakness, our management has concluded that our consolidated financial statements for the periods covered by and included in this report are prepared in accordance with U.S. GAAP and fairly present, in all material respects, our financial position, results of operations and cash flows for each of the periods presented herein.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Our internal control over financial reporting 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 and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.





## Table of Contents

Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Therefore, internal control over financial reporting determined to be effective provides only reasonable assurance regarding the reliability of financial reporting and the preparations of financial statements for external purposes in accordance with generally accepted accounting principles.

Our management carried out an evaluation of the effectiveness of our 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. Based upon this evaluation, our management concluded that our internal control over financial reporting was not effective as of December 31, 2011, because of a material weakness related to our internal level of U.S. GAAP expertise. We lack sufficient personnel with the appropriate level of knowledge, experience and training in U.S. GAAP for the preparation of financial statements in accordance with U.S. GAAP. None of our internal accounting staff, including our Chief Financial Officer, that are primarily responsible for the preparation of our books and records and financial statements in compliance with U.S. GAAP holds a license such as Certified Public Accountant in the U.S., nor have any attended U.S. institutions or extended educational programs that would provide enough of the relevant education relating to U.S. GAAP.

In order to mitigate the foregoing material weakness, we engaged an outside accounting consultant to assist us in the preparation of our financial statements to ensure that these financial statements are prepared in conformity to U.S. GAAP. Our outside accounting consultant is a Certified Public Accountant in the U.S. and has significant experience in the preparation of financial statements in conformity with U.S. GAAP. Our Chief Financial Officer and internal accounting personnel consult with our outside accounting consultant on an ongoing basis with regards to our treatment and conversion of financials from PRC GAAP to U.S. GAAP. We believe that the engagement of this outside accounting consultant lessens the possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis, and we will continue to monitor the effectiveness of this action and make any changes that our management deems appropriate. We expect to continue to rely on this outside consulting arrangement to supplement our current internal accounting staff for the foreseeable future.

Our Board of Directors and management are evaluating remediation measures that we will undertake to address this material weakness and will continue this evaluation in order to implement a comprehensive remediation plan. We expect that this plan will include but not be limited to (a) appointing a principal accounting officer with extensive U.S. GAAP training and experience, (b) hiring accounting personnel with appropriate knowledge and experience in U.S. GAAP and (c) providing more training on U.S. GAAP to accounting and other relevant personnel responsible for the preparation of books, records and financial statements. In the interim, our Chief Financial Officer has attended U.S. GAAP training courses conducted by our outside Sarbanes-Oxley consultant and intends to continue attending training courses in U.S. GAAP. Until such time as we hire qualified accounting staff and train our current accounting staff with the requisite U.S. GAAP experience, however, it is unlikely we will be able to remediate this material weakness in our internal control over financial reporting.

We believe that the foregoing steps will remediate the material weakness identified above, and we will continue to monitor the effectiveness of these steps and make any changes that our management deems appropriate.

Our independent registered public accounting firm, Goldman Kurland & Mohidin, LLP, or GKM, has audited our internal control over financial reporting as of December 31, 2011, and have issued their report, which appears in Item 15 of this Annual Report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the quarter ended December 31, 2011, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

40

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Table of Contents

## PART III

## Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the names of our directors, executive officers and certain significant employees and their ages, positions and biographical information as of the date of this report. Our executive officers are appointed by, and serve at the discretion of, our Board of Directors. Each executive officer is a full-time employee. Our directors hold office for one-year terms or until their successors have been elected and qualified. There are no family relationships between any of our directors, executive officers or other key personnel and any other of our directors, executive officers or key personnel. There are no arrangements or understandings between any of our directors or executive officers and any other persons pursuant to which such director or executive officer was selected in that capacity.

Name	Age	Position
Jun Wang	44	Chairman of the Board of Directors, President and Chief Executive Officer
Zhijuan Guo	47	Chief Financial Officer and Treasurer
Xudong Wang	37	Vice President of Strategy and Development
Huajun Ai	41	Corporate Secretary
Arnold Staloff	67	Director
Weiguo Wang	47	Director
Xin Li	39	Director
Qingtai Kong	66	Director

## Jun Wang, Chairman of the Board of Directors, President and Chief Executive Officer

Mr. Wang was appointed our Chairman of the Board of Directors, President and Chief Executive Officer on April 14, 2008. Mr. Wang founded Taiyu and was appointed Director, Chief Executive Officer and Chairman of Taiyu in 2002. Prior to that, Mr. Wang was the Assistant General Manager of Beijing HotNet Company, a large PHE components supplier in China. Mr. Wang gained substantial industry experience during his tenure as the sales manager at Honeywell China between 1996 and 1999. He started his professional career in 1994 as a Regional Sales Director at ALFA LAVAL, a global leader in the PHE industry. Mr. Wang earned a master's degree in Engineering from China's "MIT" – the renowned Tsinghua University. Mr. Wang is fluent in English. Mr. Wang was one of our original founders and has been a director and executive officer of the company for nearly a decade. As a result, he brings extensive knowledge of our operations and long-term strategy to the Board of Directors. The Board of Directors believes that Mr. Wang's vision, leadership and extensive knowledge about us and our industry is essential to our future growth. His skills include operations, marketing, business strategy and product development, risk assessment and stockholder relations.

## Zhijuan Guo, Chief Financial Officer and Treasurer

Ms. Guo was appointed our Chief Financial Officer on April 14, 2008. Ms. Guo joined Taiyu in 2002 as its Chief Financial Officer. Prior to that time, she served as the Production Planning Director of Shenyang Thermoelectric Co. Ltd. She obtained her MBA in Finance from Shenyang North Eastern University and served as the finance manager of a local real estate development firm from 1993 to 1999. From March 1999 to November 2000, she also served as Auditing Director of Shenyang Dongyu Group Corp.



Table of Contents

Xudong Wang, Vice President of Strategy and Development

Mr. Wang joined SmartHeat on February 1, 2010, as our Vice President of Strategy and Development. Prior to that time, Mr. Wang served as Vice President (Greater China) for China US Bridge Capital Limited, an international financial firm. From June 2007 to April 2009, Mr. Wang served as the Chief Financial Officer of QKL Stores, Inc., a NASDAQ-listed supermarket and department store chain in Northeast China. From April 2006 to May 2007, Mr. Wang served as Chief Financial Officer of ThyssenKrupp Presta Fawer Ltd., a Chinese subsidiary of a leading German manufacturing group. From April 2005 to April 2006, Mr. Wang served as the Financial Controller for Electronics, GmbH in Frankfurt, Germany. Mr. Wang earned his Master of International Business Administration from the University of Hamburg and his Bachelor of Accounting & Finance from the Shandong University of Finance.

Huajun Ai, Corporate Secretary

Ms. Ai was appointed our Corporate Secretary on April 14, 2008. Ms. Ai joined Taiyu in 2002 as its Corporate Secretary. From December 2000 to October 2002, she served as an accountant at Shenyang Dongyu International Trade Co., Ltd. From July 1994 to November 2000, Ms. Ai served as an accountant at Northeast Jin Cheng Industrial Corp. Ms. Ai obtained her bachelor's degree in Foreign Trade Accounting from Shenyang North Eastern University in 1994.

Arnold Staloff, Director

Mr. Staloff was appointed to our Board of Directors on June 19, 2008, and serves currently as the Chairman of our Audit Committee and member of our Compensation Committee and Nominating and Corporate Governance Committee. Mr. Staloff brings to the Board of Directors a long and successful business career, with extensive experience at both the management and board levels. Mr. Staloff has served as a director and the Chairman of the Audit Committee at NASDAQ-listed Deer Consumer Products, Inc., a small home and kitchen electronic products manufacturer, since 2009, and CleanTech Innovations, Inc., a manufacturer of structural towers for megawatt-class wind turbines, since 2010. From 2007 until his resignations in July 2010, Mr. Staloff served as a director and the Chairman of the Audit Committee at NASDAQ-listed Shiner International, Inc., a packaging and anti-counterfeit plastic film company, and then NASDAQ-listed AgFeed Industries, Inc., a feed and commercial hog producer. Mr. Staloff served as a director for Lehman Brothers Derivative Products Inc. from 1994 until October 2008. From December 2005 to May 2007, Mr. Staloff served as Chairman of the Board of SFB Market Systems, Inc., a New Jersey-based company that provided technology solutions for the management and generation of options series data. From June 1990 to March 2003, Mr. Staloff served as President and Chief Executive Officer of Bloom Staloff Corporation, an equity and options market-making firm and foreign currency options floor broker. During 1989 and 1990, Mr. Staloff served as President and Chief Executive Officer of Commodity Exchange, Inc., or COMEX. Mr. Staloff started his professional career in 1968 at the U.S. Securities and Exchange Commission. Mr. Staloff has been credited with the introduction of Options on Foreign Currencies and the precursor to Spydrs. His skills include financial analysis and accounting expertise.

Weiguo Wang, Director

Mr. Wang was appointed to our Board of Directors on June 19, 2008, and serves currently as the Chairman of our Compensation Committee and member of our Audit Committee and Nominating and Corporate Governance Committee. Mr. Wang brings over eight years of relevant industry oversight and extensive engineering experience to the Board. Mr. Wang has served as a Director of the China Special Equipment Inspection and Research Agency since 2006. Prior positions include serving as a supervisor of the Lanzhou Heat Transfer & Save Energy Engineering Center in 2006, Assistant Secretary General of the China Standardization Committee on Boilers and Pressure Vessels in 2005

and Deputy General Manager of Boilers Standard (Beijing) Technology Services Center Co., Ltd. in 2004. From July 2001 to December 2003, Mr. Wang was a teacher at Tianjin University, China. Mr. Wang holds a bachelor's degree in Mechanics, a master's degree in Fluid Mechanics and a PhD in Fluid Mechanics, all from Beijing University. His skills include business analysis, industry analysis, and long-range planning, especially as applied to manufacturing and standards implementation.

Table of Contents

Xin Li, Director

Mr. Li was appointed to our Board of Directors on July 29, 2009, and serves as the Chairman of our Nominating and Corporate Governance Committee and member of our Audit Committee and Compensation Committee. Mr. Li brings more than a decade of corporate governance and industrial operations management experience to the Board. He is a renowned management consultant in China and currently serves as the general manager of Beijing ShengGao Consulting Co., Ltd., a strategic advisory firm founded by him more than 10 years ago that focuses on providing strategic guidance and management training to global companies, including the Sangoal Metal Manufacturing Company in China. He also serves as an independent director and chairs the audit and various governance committees at several large Chinese domestic companies not listed in the United States. Mr. Li is a prolific writer in strategies and management issues. He has authored several books in the areas of management science and strategic planning. Mr. Li is proficient in Mandarin Chinese and English. He has an MBA and is a Research Fellow at the Management Science Center of Beijing University.

Qingtai Kong, Director

Mr. Kong was appointed to our Board of Directors on September 22, 2011, and serves as a member of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee. Mr. Kong is a senior engineer bringing over 20 years of management experience in the gas supply and heating industry in China to the Board, and he currently serves as commissioner of China's Industrial Gas Committee. From 1995 to 2001, Mr. Kong served as Deputy Director overseeing district heating projects for the Qinhuangdao District Bureau of Municipal & Rural Construction in Hebei Province. From 1991 to 1995, Mr. Kong served as general manager of the state-owned utility Gas Supply Corporation of Qinhuangdao in Hebei Province. Mr. Kong's career in the gas industry began in 1988 with his position as chief engineer of a gas network project in the city of Qinhuangdao.

Legal Proceedings

During the past ten years, none of our directors or executive officers has been:

- the subject of any bankruptcy petition filed by or against any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time;
- convicted in a criminal proceeding or is subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- subject to any order, judgment or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities or banking activities;
- found by a court of competent jurisdiction (in a civil action), the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, that has not been reversed, suspended, or vacated;
- subject of, or a party to, any order, judgment, decree or finding, not subsequently reversed, suspended or vacated, relating to an alleged violation of a federal or state securities or commodities law or regulation, law or regulation respecting financial institutions or insurance companies, law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization, any registered entity or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

None of our directors, officers or affiliates, or any beneficial owner of 5% or more of our common stock, or any associate of such persons, is an adverse party in any material proceeding to, or has a material interest adverse to, us or

any of our subsidiaries.

43

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## Table of Contents

### Audit Committee and Audit Committee Financial Expert

We have established a separately-designated standing audit committee in accordance with Section 3(a)(58)(A) of the Exchange Act. Our Audit Committee consists of Messrs. Staloff, Wang, Li and Kong, each of whom is an independent director. Mr. Staloff, Chairman of the Audit Committee, is an “audit committee financial expert” as defined under Item 407(d) of Regulation S-K. The purpose of the Audit Committee is to represent and assist our Board of Directors in its general oversight of our accounting and financial reporting processes, audits of the financial statements and internal control and audit functions. As more fully described in its charter, a copy of which is available on our website at [www.smartheatinc.com](http://www.smartheatinc.com), the functions of the Audit Committee include the following:

- appointment of independent auditors, determination of their compensation and oversight of their work;
  - review the arrangements for and scope of the audit by independent auditors;
    - review the independence of the independent auditors;
  - consider the adequacy and effectiveness of the internal controls over financial reporting;
    - pre-approve audit and non-audit services;
- establish procedures regarding complaints relating to accounting, internal accounting controls, or auditing matters;
  - review and approve any related party transactions;
- discuss with management our major financial risk exposures and our risk assessment and risk management policies; and
- discuss with management and the independent auditors our draft quarterly interim and annual financial statements and key accounting and reporting matters.

### Procedures for Shareholder Recommendations of Nominees to the Board of Directors

During 2011, there were no material changes to the procedures described in our Proxy Statement relating to the 2011 Annual Meeting of Shareholders by which shareholders may recommend nominees to our Board of Directors.

### Code of Ethics

Our Board of Directors has adopted a Code of Conduct, which applies to all of our directors, officers and employees, that constitutes our “code of ethics” within the meaning of Section 406 of the Sarbanes-Oxley Act and our “code of conduct” within the meaning of the listing standards of NASDAQ. The purpose of the Code of Conduct is to promote honest and ethical conduct. The Code of Conduct is posted on our website located at [www.smartheatinc.com](http://www.smartheatinc.com) and is available in print, without charge, upon written request to SmartHeat Inc. at A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110141, Attn: Corporate Secretary. We intend to disclose any future amendments to our Code of Conduct, and any waivers of provisions of the Code of Conduct required to be disclosed under the rules of the SEC or listing standards of NASDAQ, on our website.

Table of Contents

## Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of our common stock, to file reports regarding ownership of, and transactions in, our securities with the Commission and to provide us with copies of those filings. Based solely on our review of the copies received by us and on the written representations of certain reporting persons, we believe that all such Section 16(a) filing requirements were timely met during 2011.

## Item 11. Executive Compensation

As a “smaller reporting company,” we have elected to follow the scaled disclosure requirements for smaller reporting companies with respect to the disclosures required by Item 402 of Regulation S-K. Under such scaled disclosure, we are not required to provide a Compensation Discussion and Analysis, Compensation Committee Report and certain other tabular and narrative disclosures relating to executive compensation.

## Executive Compensation

The following table sets forth information concerning the compensation for the years ended December 31, 2011 and 2010, of each of our named executive officers.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Nonequity Nonqualified Incentive Plan Compensation			Total (\$)
						Earning Compensation (\$)	Deferred Compensation (\$)	All Other Compensation (\$)	
Jun Wang Chairman, President and Chief Executive Officer	2011	150,000	0	139,750	0	0	0	0	289,750
	2010	150,000	0	0	0	0	0	0	150,000
Zhijuan Guo Chief Financial Officer	2011	22,000	0	0	0	0	0	0	22,000
	2010	22,000	0	0	0	0	0	0	22,000
Xudong Wang Vice President of Strategy and Development	2011	120,000	0	290,250	0	0	0	0	410,250
	2010	120,000	0	0	367,107	0	0	0	487,107

- (1) Amounts shown reflect aggregate grant date fair value of awards and do not reflect whether the recipient actually has realized a financial benefit from such grant, such as by selling the stock or exercising the options. A discussion of the assumptions used in calculating the award values may be found in Note 16 to our consolidated financial statements contained herein.



Table of Contents

The following table sets forth information concerning the outstanding equity awards held by each of our named executive officers at December 31, 2011.

## Outstanding Equity Awards at Fiscal Year-End for 2011

Name	Number of Securities Underlying Unexercised Options		Option Awards		Option Expiration Date
	(#) Exercisable	(#) Unexercisable	Option Exercise Price (\$)		
Jun Wang	-	-	-		-
Zhijuan Guo	-	-	-		-
Xudong Wang	2,500 (1)		118.50		06/30/2016
	-	2,500	(2)	118.50	06/29/2017

(1) Options granted on February 1, 2010, with a life of five years that vested on June 30, 2011.

(2) Options granted on February 1, 2010, with a life of five years vesting on June 29, 2012.

## Employment Agreements

On January 1, 2008, Taiyu entered into a 3-year employment agreement with Jun Wang, which agreement was renewed on the same terms through December 31, 2013, upon mutual agreement between Mr. Wang and Taiyu. Pursuant to the terms of his employment agreement, Mr. Wang shall receive a salary in an amount that is not less than the lowest minimum wage per month paid in Shenyang and shall be based on the uniform wage and incentive system in Shenyang. Effective on February 1, 2010, the Compensation Committee approved an increase in the annual compensation of Mr. Wang to a base salary of \$150,000 per year from \$18,000 per year. The Compensation Committee believed it in the best interests of the company to approve the increase in salary for Mr. Wang because of his continued importance to our long-term strategy and success and increased responsibilities since 2008 as the principal executive officer of a U.S.-listed public company when his prior base salary was established under his employment agreement.

On January 1, 2008, Taiyu entered into a 3-year employment agreement with Zhijuan Guo, which agreement was renewed on the same terms through December 31, 2013, upon mutual agreement between Ms. Guo and Taiyu. Pursuant to the terms of her employment agreement, Ms. Guo shall receive a salary in an amount that is not less than the lowest minimum wage per month paid in Shenyang and shall be based on the uniform wage and incentive system in Shenyang. In addition, Ms. Guo shall be entitled to overtime pay in accordance with the applicable law.

On February 1, 2010, SmartHeat entered into an employment agreement with Xudong Wang for a term ending on June 30, 2013. Mr. Wang is compensated at \$120,000 per year and eligible for annual cash bonuses at the sole discretion of the Board of Directors.

Each of the above employment agreements contains provisions prohibiting competition by such officers following their employment with us.

## Table of Contents

We currently do not have any defined pension plan for our named executive officers. Pursuant to their employment agreements, we shall provide to such officers all the necessary insurances and social welfares, including but not limited to medical, work injury, maternity, retirement and unemployment insurance and housing fund, according to our policies and the relevant laws and regulations of local governmental authorities and the PRC.

We currently do not have nonqualified defined contribution or other plans that provides for the deferral of compensation for our named executive officers nor do we currently intend to establish any such plan.

### Grants of Plan-Based Awards

On May 25, 2010, our shareholders approved the 2010 Equity Incentive Plan authorizing the issuance of up to 100,000 shares of our common stock. The Compensation Committee administers the Plan and may grant awards, including restricted shares, incentive stock options and nonqualified stock options, under the Plan to our officers, directors and employees pursuant to the guidelines set forth in the Plan.

On November 28, 2011, Jun Wang and Xudong Wang each received a grant of 32,500 restricted shares of our common stock under the 2010 Equity Incentive Plan in recognition of their service and contributions to us. The restricted shares were fully vested on the grant date and issued pursuant to exemptions from registration under the Securities Act.

On April 14, 2011, Xudong Wang received a grant of 5,000 restricted shares of our common stock under the 2010 Equity Incentive Plan with the intent of reflecting his expected future performance and to further align Mr. Wang's interests with those of our shareholders. The restricted shares were fully vested on the grant date and issued pursuant to exemptions from registration under the Securities Act.

On February 1, 2010, pursuant to his employment agreement, Xudong Wang received a grant of options to purchase 5,000 shares of our common stock at an exercise price per share of \$118.50. The options have a life of 5 years and options to purchase 2,500 shares of our common stock vested on June 30, 2011, with the remaining options to purchase 2,500 shares of our common stock to vest on June 29, 2012, subject to Mr. Wang's continued employment.

### Change-In-Control and Separation Agreements

Our employment agreements with Jun Wang and Zhijuan Guo specify the conditions under which the agreements may be terminated and set forth minimum severance payments according to the relevant laws and regulations of local governmental authorities and the PRC.

Our employment agreement with Xudong Wang specifies the conditions under which the agreement may be terminated and stipulates that Mr. Wang shall not be entitled to severance payments upon termination.

We do not have any other existing arrangements providing for payments or benefits in connection with the resignation, severance, retirement or other termination of any of our named executive officers, or a change in control of the company or a change in the named executive officer's responsibilities following a change in control.

Table of Contents

## Compensation of Directors

The following table sets forth information concerning the compensation of our directors, except for the Chairman of the Board, for the year ended December 31, 2011.

Director Compensation Table for 2011				
Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Arnold Staloff(1)	50,000	-	-	50,000
Weiguo Wang	12,000	-	-	12,000
Xin Li	17,910	-	-	17,910
Qingtai Kong(2)	3,750	-	-	3,750
Wenbin Lin(3)	-	-	-	-

(1) As of December 31, 2011, Mr. Staloff held vested options to purchase 1,000 shares of our common stock at an exercise price per share of \$46.00.

(2) Mr. Kong was elected director on September 22, 2011.

(3) Mr. Lin voluntarily resigned from his position as director on July 29, 2011, and, as a non-independent director, did not receive any compensation for his service as director.

Our independent directors receive base cash compensation of \$12,000 per year, paid in equal quarterly installments, for their service. In addition, at the discretion of the non-interested members of the Compensation Committee, independent directors are eligible to receive bonuses for service to our company outside the normal duties as a director and grants of options to purchase our common stock under the 2010 Equity Incentive Plan. Mr. Staloff receives compensation of \$50,000 per year, paid in equal quarterly installments, which includes \$10,000 for serving as Chair of the Audit Committee. Messrs. Li and Kong receive compensation of \$17,910 and \$15,000 per year, respectively, paid in equal quarterly installments. We do not compensate our non-independent directors for serving as our directors. All directors are eligible to receive reimbursement of expenses incurred with respect to attendance at board meetings and meetings of committees thereof, which is not included in the above table. We do not maintain a medical, dental or retirement benefits plan for the directors.

The directors may determine remuneration to be paid to the directors with interested members refraining from voting. The Compensation Committee will assist the directors in reviewing and approving the compensation structure for the directors.

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

The following sets forth information as of March 28, 2012, regarding the number of shares of our common stock beneficially owned by (i) each person that we know beneficially owns more than 5% of our outstanding common stock, (ii) each of our named executive officers, (iii) each of our directors and (iv) all of our named executive officers and directors as a group.

The amounts and percentages of our common stock beneficially owned are reported on the basis of SEC rules governing the determination of beneficial ownership of securities. Under the SEC rules, a person is deemed to be a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of such security, or “investment power,” which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has the right to acquire beneficial ownership within 60 days through the exercise of any stock option, warrant or other right. Under

these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest.

Table of Contents

Unless otherwise indicated, each of the shareholders named in the table below, or his or her family members, has sole voting and investment power with respect to such shares of our common stock. Except as otherwise indicated, the address of each of the shareholders listed below is: c/o SmartHeat Inc., A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110141.

As of March 28, 2012, there were 3,955,774 shares of our common stock issued and outstanding.

Name of beneficial owner	Number of shares	Percent of class
<b>5% Shareholders</b>		
Beijing YSKN Machinery & Electronic Equipment Co., Ltd. Rm 1106, Huapu International Plaza No.19, Chaowai Street, Chaoyang District Beijing, China	680,800(1)	17.21%
Yang In Cheol #630-5, Namchon-Dong Namdong-Yu Incheon, South Korea 302-405	384,800(2)	9.73%
ShenYang ZhiCe Investment Co., Ltd No. 1 Yuebin Street Shenhe District Shenyang, China 110027	296,000(3)	7.48%
<b>Directors and Named Executive Officers</b>		
Jun Wang, Chairman, President and Chief Executive Officer	(4) 372,900	% 9.43
Xudong Wang, Vice President of Strategy and Development	(5) 40,000	% 1.01
Arnold Staloff, Director	2,020(6)	*%
All Directors and Named Executive Officers as a Group (7 Persons)	414,920	% 10.48

\* Represents less than 1% of shares outstanding.

- (1) Disclosed on Amendment No. 1 to the Schedule 13D for Beijing YSKN Machinery & Electronic Equipment Co., Ltd (“Beijing YSKN”) filed on June 30, 2008, for beneficial ownership as of May 7, 2008. Beijing YSKN has sole power to vote and dispose of the shares owned by it. Jun Wang and Fang Li each hold 50% of the equitable and legal rights, title and interests in and to the share capital of Beijing YSKN and, as a result of such ownership, each of Messrs. Wang and Li has the shared power to vote and dispose of the shares held by Beijing YSKN.
- (2) Disclosed on the Schedule 13G for Yang In Cheol filed on April 25, 2008, for beneficial ownership as of April 14, 2008.
- (3) Disclosed on the Schedule 13G for ShenYang ZhiCe Investment Co., Ltd (“ShenYang ZhiCe”) filed on April 25, 2008, for beneficial ownership as of April 14, 2008. ShenYang ZhiCe has sole power to vote and dispose of the shares owned by it.
  - (4) Consists of 340,400 shares beneficially owned through Mr. Wang’s interests in Beijing YSKN.
  - (5) Consists of options to purchase 2,500 shares of our common stock that are immediately exercisable.
  - (6) Consists of options to purchase 1,000 shares of our common stock that are immediately exercisable and 10 shares owned by Mr. Staloff’s spouse.





Table of Contents

## Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth information regarding all equity compensation plans, including individual compensation arrangements, under which our common stock is authorized for issuance as of December 31, 2011.

## Equity Compensation Plan Information

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted- Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders			
2010 Equity Incentive Plan	-	-	0
Equity compensation plans not approved by security holders	1,000(1)	\$ 46.00	-
	5,000(2)	118.50	-
<b>Total</b>	<b>6,000</b>	<b>\$ 106.40</b>	<b>0</b>

(1) Consists of options granted to Arnold Staloff on July 17, 2008, to purchase 1,000 shares of our common stock at an exercise price per share of \$46.00. The options vested in full over a three-year period and expire after five years.

(2) Consists of options granted to Xudong Wang on February 1, 2010, to purchase 5,000 shares of our common stock at an exercise price per share of \$118.50. The options have a life of 5 years and options to purchase 2,500 shares of our common stock vested on June 30, 2011, with the remaining options to purchase 2,500 shares of our common stock to vest on June 29, 2012, subject to Mr. Wang's continued employment.

Table of Contents

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

## Certain Relationships and Related Transactions

There were no transactions with any related persons (as that term is defined in Item 404 in Regulation S-K) during 2011 or 2010, or any currently proposed transaction, in which we were or are to be a participant and the amount involved was in excess of \$120,000 and in which any related person had a direct or indirect material interest.

Our written policy for related party transactions provides that we will enter into or ratify a transaction with a related party only when our Board of Directors, acting through the Audit Committee, determines that the transaction is in the best interests of the company and our shareholders. The policy requires the review and approval by our Audit Committee for any transaction in which (i) the aggregate amount involved will or may be expected to exceed \$120,000 in any fiscal year, (ii) we are a participant and (iii) any related person has or will have a direct or indirect interest. Related persons include our executive officers, directors, director nominees, persons known to be the beneficial owner of more than 5% of our outstanding common stock or immediate family members of any of the foregoing persons. In determining whether to approve or ratify a transaction with a related party, the Audit Committee will take into account, among other relevant factors, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances. If advance approval of a transaction is not feasible, the Audit Committee may approve and ratify the transaction in accordance with the policy. Any member of the Audit Committee who is a related party with respect to a transaction under review may not participate in the deliberations or vote on the approval of the transaction.

## Director Independence

Our Board of Directors has determined that each of Arnold Staloff, Weiguo Wang, Xin Li and Qingtai Kong is an independent director as defined by the listing standards of NASDAQ currently in effect and all applicable rules and regulations of the SEC. We have established the following standing committees of the Board of Directors: Audit, Compensation and Nominating and Corporate Governance. All members of the Audit, Compensation and Nominating and Corporate Governance Committees satisfy the independence standards applicable to members of each such committee. The Board of Directors made this affirmative determination regarding these directors' independence based on discussions with the directors and on its review of the directors' responses to a standard questionnaire regarding employment and compensation history; affiliations, family and other relationships; and transactions between us and the directors, if any. The Board of Directors considered relationships and transactions between each director, or any member of his immediate family, and our company, our subsidiaries and our affiliates. The purpose of the Board of Director's review with respect to each director was to determine whether any such relationships or transactions were inconsistent with a determination that the director is independent under NASDAQ rules.

## Item 14. Principal Accounting Fees and Services

Our Audit Committee selected GKM as the independent registered certified public accounting firm to audit the books and accounts of our company and subsidiaries for the fiscal year ending December 31, 2011. GKM has served as our independent accountant since April 14, 2008. The following table presents the aggregate fees billed for professional services rendered by GKM for the years ended December 31, 2011 and 2010.

	2011	2010
Audit fees	\$234,750	\$217,500
Audit-related fees	2,500	28,625
Tax fees	0	0
All other fees	0	0



Table of Contents

In the above table, “audit fees” are fees billed for services provided related to the audit of our annual financial statements, quarterly reviews of our interim financial statements and services normally provided by the independent accountant in connection with statutory and regulatory filings or engagements for those fiscal periods. “Audit-related fees” are fees not included in audit fees that are billed by the independent accountant for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements. “Tax fees” are fees billed by the independent accountant for professional services rendered for tax compliance, tax advice and tax planning. “All other fees” are fees billed by the independent accountant for products and services not included in the foregoing categories.

Audit Committee’s Pre-Approval Policy

The Audit Committee pre-approves all audit and permissible non-audit services provided by the independent accountants. These services may include audit services, audit-related services, tax services and other services. The Audit Committee has adopted a written policy for the pre-approval of services provided by the independent accountants, under which policy the Audit Committee generally pre-approves services for up to one year and any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. In addition, the Audit Committee may also pre-approve particular services on a case-by-case basis. For each proposed service, the independent accountant is required to provide detailed back-up documentation at the time of approval. The Audit Committee may delegate pre-approval authority to one or more of its members. Such a member must report any decisions to the Audit Committee at the next scheduled meeting.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The following documents are filed as part of or are included in this Annual Report:

1. Financial statements listed in the Index to Financial Statements, filed as part of this Annual Report beginning on page F-1; and
2. Exhibits listed in the Exhibit Index filed as part of this Annual Report.

Table of Contents

SMARTHEAT INC.

Consolidated Financial Statements  
Years Ended December 31, 2011 and 2010

Index to Financial Statements

	Page
<u>Report of Independent Registered Public Accounting Firm</u>	F-2
Financial Statements	
<u>Consolidated Balance Sheets as of December 31, 2011 and 2010</u>	F-3
<u>Consolidated Statements of Operations and Comprehensive Income (Loss) years ended December 31, 2011 and 2010</u>	F-4
<u>Consolidated Statements of Stockholders' Equity years ended December 31, 2011 and 2010</u>	F-5
<u>Consolidated Statements of Cash Flows years ended December 31, 2011 and 2010</u>	F-6
Notes to Consolidated Financial Statements	F-7

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders of  
SmartHeat Inc.

We have audited the accompanying consolidated balance sheets of SmartHeat, Inc. (the “Company”) as of December 31, 2011 and 2010, and the related consolidated statements of income, stockholders’ equity and comprehensive income, and cash flows for the years ended December 31, 2011 and 2010. In addition, in our opinion, the financial statement schedule listed in Note 20 to the financial statements presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. We also have audited SmartHeat Inc.’s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). SmartHeat Inc.’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control. Our responsibility is to express an opinion on these financial statements and an opinion on the Company’s internal control over financial reporting based on our audits.

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

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

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

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial

statements will not be prevented or detected on a timely basis. The following material weakness was identified:

- Lack of technical accounting expertise among financial staff regarding (a) U.S. GAAP and (b) requirements of the PCAOB Auditing Standard No. 5 and COSO in the assessment of internal control over financial reporting.

The material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2011 consolidated financial statements of the Company as of and for the year ended December 31, 2011.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of SmartHeat Inc. as of December 31, 2011 and 2010, and the consolidated results of its operations and its consolidated cash flows for the years ended December 31, 2011 and 2010, in conformity with accounting principles generally accepted in the United States of America.

Also in our opinion, the effect of the aforementioned material weakness on the achievement of the objectives of the internal control criteria, SmartHeat Inc. did not maintain effective internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Our opinion on the effectiveness of internal control over financial reporting does not affect our opinion on the consolidated financial statements.

Goldman Kurland & Mohidin LLP  
Encino, California  
April 1, 2012



Table of ContentsSMARTHEAT INC. AND SUBSIDIARIES  
CONSOLIDATED BALANCE SHEETS

	December 31, 2011	December 31, 2010
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash & equivalents	\$12,419,922	\$56,806,471
Restricted cash	2,688,691	1,949,742
Accounts receivable, net	47,055,517	47,224,476
Retentions receivable	3,583,898	2,548,401
Advances to suppliers	17,603,984	7,839,401
Other receivables, prepayments and deposits	6,663,330	6,301,772
Inventories, net	53,648,549	26,585,362
Deferred tax asset	-	380,232
Notes receivable - bank acceptances	1,916,320	1,457,457
<b>Total current assets</b>	<b>145,580,211</b>	<b>151,093,314</b>
<b>NONCURRENT ASSETS</b>		
Restricted cash	204,991	502,672
Retentions receivable	670,291	1,062,167
Advance to supplier for equipment	1,122,914	512,178
Construction in progress	522,876	81,204
Property and equipment, net	11,348,601	8,381,019
Intangible assets, net	15,419,805	14,243,734
Goodwill	2,098,332	-
Deferred tax asset	-	22,266
Other noncurrent asset	10,044	-
<b>Total noncurrent assets</b>	<b>31,397,854</b>	<b>24,805,240</b>
<b>TOTAL ASSETS</b>	<b>\$176,978,065</b>	<b>\$175,898,554</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$12,660,100	\$4,490,333
Advance from customers	4,585,218	1,131,193
Taxes payable	1,178,712	2,000,456
Accrued liabilities and other payables	4,136,298	3,039,701
Notes payable - bank acceptances	3,278,232	2,207,280
Loans payable	10,633,402	9,059,749
<b>Total current liabilities</b>	<b>36,471,962</b>	<b>21,928,712</b>
<b>DEFERRED TAX LIABILITY</b>	<b>189,516</b>	<b>-</b>

LONG-TERM PAYABLE	2,281,023	-
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Common stock, \$0.001 par value; 75,000,000 shares authorized, 3,955,194 and 3,855,194 shares issued and outstanding at December 31, 2011 and 2010, respectively	3,956	3,855
Paid-in capital	102,985,737	102,285,724
Statutory reserve	5,396,014	5,301,918
Accumulated other comprehensive income	11,119,887	4,252,261
Retained earnings	17,445,733	41,500,015
Total Company stockholders' equity	136,951,327	153,343,773
NONCONTROLLING INTEREST	1,084,237	626,069
TOTAL EQUITY	138,035,564	153,969,842
TOTAL LIABILITIES AND EQUITY	\$176,978,065	\$175,898,554

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

	YEARS ENDED DECEMBER 31,	
	2011	2010
Net sales	\$65,221,104	\$125,406,862
Cost of goods sold	44,559,093	80,694,945
Gross profit	20,662,011	44,711,917
Operating expenses		
Selling	9,514,588	8,559,665
General and administrative	25,167,249	9,461,212
Goodwill impairment	8,956,313	-
Total operating expenses	43,638,150	18,020,877
Income (loss) from operations	(22,976,139 )	26,691,040
Non-operating income (expenses)		
Interest income	243,810	433,534
Interest expense	(925,250 )	(131,350 )
Financial expense	(150,371 )	(49,751 )
Foreign exchange transaction gain (loss)	(407,880 )	33,932
Other income (expense), net	(26,230 )	174,337
Total non-operating income (expenses), net	(1,265,921 )	460,702
Income (loss) before income tax	(24,242,060 )	27,151,742
Income tax expense	186,373	4,533,112
Net income (loss) before noncontrolling interest	(24,428,433 )	22,618,630
Less: Loss attributable to noncontrolling interest	(468,247 )	(79,813 )
Net income (loss) to SmartHeat Inc.	(23,960,186 )	22,698,443
Other comprehensive item		
Foreign currency translation gain attributable to SmartHeat Inc.	6,867,626	3,282,273
Foreign currency translation gain attributable to noncontrolling interest	81,103	11,681
Comprehensive income (loss) attributable to SmartHeat Inc.	\$(17,092,560 )	\$25,980,716
Comprehensive loss attributable to noncontrolling interest	\$(387,144 )	\$(68,132 )

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Basic weighted average shares outstanding	3,867,578	3,341,942
Diluted weighted average shares outstanding	3,867,578	3,345,368
Basic earnings (loss) per share	\$(6.20	) \$6.79
Diluted earnings (loss) per share	\$(6.20	) \$6.79

The accompanying notes are an integral part of these consolidated financial statements.

F-4

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY  
YEARS ENDED DECEMBER 31, 2011 AND 2010

	Common stock				Accumulated other comprehensive	Retained	Total	Noncontro interes
	Shares	Amount	Paid-in capital	Statutory reserves	income	earnings		
Balance at January 1, 2010	3,279,488	\$3,279	\$74,946,886	\$2,872,006	\$969,988	\$21,231,484	\$100,023,643	\$694,200
Shares issued	574,081	574	27,040,167	-	-	-	27,040,741	-
Warrants exercised	1,425	1	85,499	-	-	-	85,500	-
Shares issued for consulting	200	-	18,090	-	-	-	18,090	-
Compensation related to stock options	-	-	195,083	-	-	-	195,083	-
Net income for year	-	-	-	-	-	22,698,443	22,698,443	(79,810)
Transfer to statutory reserves	-	-	-	2,429,912	-	(2,429,912)	-	-
Foreign currency translation gain	-	-	-	-	3,282,273	-	3,282,273	11,681
Balance at December 31, 2010	3,855,194	3,855	102,285,724	5,301,918	4,252,261	41,500,015	153,343,773	626,060
Capital contribution from minority	-	-	-	-	-	-	-	845,310
Shares issued for employee compensation	100,000	100	558,900	-	-	-	559,000	-
Compensation expense to stock options	-	-	141,114	-	-	-	141,114	-

Fractional shares - split effect	580	1	(1	)	-	-	-	-	-
Net income for year	-	-	-	-	-	(23,960,186)	(23,960,186)	(468,2	
Transfer to statutory reserves	-	-	-	94,096	-	(94,096	)	-	
Foreign currency translation gain	-	-	-	-	6,867,626	-	6,867,626	81,103	
Balance at December 31, 2011	3,955,774	\$3,956	\$102,985,737	\$5,396,014	\$11,119,887	\$17,445,733	\$136,951,327	\$1,084,	

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEARS ENDED DECEMBER 31,	
	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Income (loss) including noncontrolling interest	\$ (24,428,433)	\$ 22,618,630
Adjustments to reconcile income (loss) including noncontrolling interest to net cash used in operating activities:		
Depreciation and amortization	1,678,653	1,011,815
Provision for bad debts	7,635,040	-
Provision for inventory impairment	3,733,390	-
Unearned interest on accounts receivable	(26,683)	(71,133)
Stock option expense	141,114	195,083
Stock issued for consulting service	559,000	18,090
Loss on disposal of fixed assets	9,605	-
Goodwill impairment	8,956,313	-
Changes in deferred tax	(82,676)	(410,616)
(Increase) decrease in current assets:		
Accounts receivable	(4,052,545)	(14,716,105)
Retentions receivable	(448,424)	(2,285,983)
Advances to suppliers	(9,213,499)	38,384
Other receivables, prepayments and deposits	(1,506,485)	715,988
Inventories	(26,969,530)	(14,651,940)
Increase (decrease) in current liabilities:		
Accounts payable	6,759,686	3,634,538
Advance from customers	3,388,328	(1,042,449)
Taxes payable	(500,373)	(193,868)
Accrued liabilities and other payables	1,862,772	(3,993,197)
Increase (decrease) in noncurrent asset:		
Other noncurrent	240,427	-
Net cash used in operating activities	(32,264,320)	(9,132,763)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Change in restricted cash	(308,291)	(1,037,592)
Acquisition of property & equipment	(2,612,263)	(1,112,629)
Acquisition of intangible assets	(151,551)	(10,120,267)
Cash received from disposal of fixed assets	39,655	-
Cash paid for acquisition	(13,516,138)	-
Cash acquired from acquisition of subsidiaries	429,124	-
Notes receivable	(375,029)	(495,873)
Advance for equipment purchase	(570,287)	(501,071)
Construction in progress	(426,828)	(79,444)

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Net cash used in investing activities	(17,491,608)	(13,346,876)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Warrants exercised	-	85,500
Proceeds from short-term loans	8,825,169	4,431,642
Repayment to short-term loans	(8,518,232)	-
Issuance of common stock	-	27,040,742
Long-term payable	2,012,758	-
Cash contribution from noncontrolling interest	758,851	-
Notes payable	934,796	-
Payment on notes payable	-	(2,117,001)
Net cash provided by financing activities	4,013,342	29,440,883
EFFECT OF EXCHANGE RATE CHANGE ON CASH & EQUIVALENTS	1,356,037	877,235
NET (DECREASE) INCREASE IN CASH & EQUIVALENTS	(44,386,549)	7,838,479
CASH & EQUIVALENTS, BEGINNING OF YEAR	56,806,471	48,967,992
CASH & EQUIVALENTS, END OF YEAR	\$ 12,419,922	\$ 56,806,471
Supplemental cash flow data:		
Income tax paid	\$ 1,944,173	\$ 3,738,517
Interest paid	\$ 898,706	\$ 242,961

The accompanying notes are an integral part of these consolidated financial statements.



Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

1. ORGANIZATION AND DESCRIPTION OF BUSINESS

SmartHeat Inc., formerly known as Pacific Goldrim Resources, Inc. (the “Company” or “SmartHeat”), was incorporated on August 4, 2006, in the State of Nevada. The Company, through its operating subsidiaries in China and Germany, designs, manufactures, sells and services plate heat exchangers (“PHEs”), PHE Units, which combine PHEs with various pumps, temperature sensors, valves and automated control systems, heat meters and heat pumps for use in commercial and residential buildings.

On April 14, 2008, the Company entered into a Share Exchange Agreement (the “Share Exchange Agreement”) to acquire Shenyang Taiyu Machinery and Electronic Equipment Co., Ltd., subsequently renamed SmartHeat Taiyu (Shenyang) Energy Technology Co., Ltd. (“Taiyu”), a privately held Sino-foreign joint venture company formed under the laws of the People’s Republic of China (“PRC”) on July 24, 2002, and engaged in the design, manufacture, sale and servicing of plate heat exchange products in China. The Share Exchange Agreement was entered into by SmartHeat, Taiyu and the shareholders of Taiyu. Pursuant to the Share Exchange Agreement, all of the equitable and legal rights, title and interests in and to Taiyu’s share capital of Yuan 25,000,000 were exchanged for 1,850,000 shares of SmartHeat’s common stock (the “Share Exchange”). SmartHeat received PRC government approval on May 28, 2008, of its subscription for 71.6% of the registered capital of Taiyu, and approval on June 3, 2009, of the transfer of the remaining 28.4% ownership of Taiyu from the original joint venture shareholders who had received shares of SmartHeat common stock in the Share Exchange. Concurrent with the Share Exchange, one of SmartHeat’s shareholders cancelled 250,000 issued and outstanding shares of SmartHeat common stock pursuant to a split-off agreement dated April 14, 2008. As a result of the Share Exchange, Taiyu became a wholly foreign-owned enterprise of SmartHeat.

Prior to the acquisition of Taiyu, the Company was a non-operating public shell. Pursuant to Securities and Exchange Commission (“SEC”) rules, the merger or acquisition of a private operating company into or by a non-operating public shell with nominal net assets was considered a capital transaction rather than a business combination. Accordingly, for accounting purposes the transaction was treated as a reverse acquisition and recapitalization and pro-forma information was not presented. Transaction costs incurred in the reverse acquisition were expensed.

On September 25, 2008, the Company entered into a share exchange agreement with Asialink (Far East) Limited to acquire all of the outstanding capital stock of SanDeKe Co., Ltd., a Shanghai-based manufacturer of PHEs (“SanDeKe”) for \$741,516.

On June 12, 2009, the Company incorporated a new subsidiary, SmartHeat Siping Beifang Energy Technology Co., Ltd. (“SmartHeat Siping”), to manufacture PHEs.

On June 16, 2009, Taiyu closed an asset purchase transaction with Siping Beifang Heat Exchanger Manufacture Co., Ltd. (“Siping Beifang”), a company organized under the laws of the PRC, to purchase certain assets consisting of the plant, equipment and certain land use rights for RMB 54,000,000 (\$7,906,296). Taiyu then transferred all the acquired assets to SmartHeat Siping, the newly incorporated subsidiary. The Company paid RMB 7,250,000 (\$1,061,500) upon the completion of inventory inspection, with the remaining consideration paid as of June 30, 2011.

On August 14, 2009, the Company formed Beijing SmartHeat Jinhui Energy Technology Co., Ltd. (“Jinhui”), a joint venture in Beijing with registered capital of RMB 10 million (\$1.46 million), to provide consulting services and expand the Company’s sales of PHEs into new industries and regions of China. SmartHeat owns 52% of Jinhui and

invested approximately \$765,000.

On April 7, 2010, the Company formed SmartHeat (China) Investment Co., Ltd. (“SmartHeat Investment”), an investment holding company and wholly owned subsidiary in Shenyang with registered capital of \$70 million.

On April 12, 2010, SmartHeat Investment formed SmartHeat (Shenyang) Energy Equipment Co., Ltd. (“SmartHeat Energy”), a wholly owned subsidiary in Shenyang with registered capital of \$30 million, for the research, development, manufacturing and sales of energy products.

F-7

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

On May 6, 2010, the Company formed SmartHeat (Shanghai) Trading Co., Ltd. (“SmartHeat Trading”) through a nominee to market and expand sales of the Company’s Taiyu-branded products. The Company made a capital contribution of \$1.5 million, and, from inception until November 9, 2011, controlled and was entitled to 100% of the profit or loss of SmartHeat Trading pursuant to an investment agreement dated February 1, 2010. Effective as of November 9, 2011, the Company terminated the nominee-owner relationship and acquired direct control over SmartHeat Trading.

On January 7, 2011, the Company invested \$771,658 for 51% of the equity interest in Hohhot Ruicheng Technology Co., Ltd. (“Ruicheng”), a joint venture formed on December 2, 2010, in Hohhot City, China, for the design and manufacture of heat meters.

On March 1, 2011, the Company entered into a purchase agreement with Shenyang Bingchuan Refrigerating Machine Limited Company, a Shenyang-based state-owned heat pump manufacturer and designer, which was renamed SmartHeat (Shenyang) Heat Pump Technology Co., Ltd. (“SmartHeat Pump”). The Company paid RMB 50 million (\$7.6 million) to acquire 95% of the equity interest in SmartHeat Pump, with a local government entity retaining the remaining 5% equity interest.

On March 3, 2011, the Company completed the acquisition of Gustrower Warmepumpen GmbH, a designer and manufacturer of high efficiency heat pumps in Germany subsequently renamed SmartHeat Deutschland GmbH (“SmartHeat Germany”), from Conergy AG for EUR 4,248,082 (\$5,898,887) paid at closing. This acquisition will extend the Company’s clean technology heating solutions into the rapidly growing heat pump markets in Europe and China, enabling its customers to purchase technologically advanced heat pumps at competitive prices.

Effective February 7, 2012, the Company implemented a one-for-ten reverse stock split of its common stock as approved by the Board of Directors on January 19, 2012. All share amounts and per share prices were retroactively restated to reflect the effect of this reverse stock split.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### Principles of Consolidation

The accompanying consolidated financial statements include the accounts of SmartHeat’s U.S. parent, Taiyu, SanDeKe, SmartHeat Siping, Jinhui, SmartHeat Investment, SmartHeat Energy, SmartHeat Trading, Ruicheng, SmartHeat Germany and SmartHeat Pump, which are collectively referred to as the “Company.” All significant intercompany accounts and transactions were eliminated in consolidation.

### Noncontrolling Interest

The Company follows Financial Accounting Standards Board’s (“FASB”) Accounting Standards Codification (“ASC”) Topic 810, “Consolidation,” which established new standards governing the accounting for and reporting of noncontrolling interests (“NCIs”) in partially owned consolidated subsidiaries and the loss of control of subsidiaries. Certain provisions of this standard indicate, among other things, that NCIs, previously referred to as minority interests, be treated as a separate component of equity, not as a liability, as was previously the case, that increases and decreases in the parent’s ownership interest that leave control intact be treated as equity transactions rather than as step acquisitions or dilution gains or losses and that losses of a partially owned consolidated subsidiary be allocated to the

NCI even when such allocation might result in a deficit balance. This standard also required changes to certain presentation and disclosure requirements. Losses attributable to the NCI in a subsidiary may exceed the NCI's interests in the subsidiary's equity. The excess attributable to the NCI is attributed to those interests. The NCI shall continue to be attributed its share of losses even if that attribution results in a deficit NCI balance.

#### Use of Estimates

In preparing the financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP"), management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the dates of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Significant estimates, required by management, include the recoverability of long-lived assets, allowance for doubtful accounts and the reserve for obsolete and slow-moving inventories. Actual results could differ from those estimates.

F-8

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

## Cash and Equivalents

For purposes of the statement of cash flows, the Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. As of December 31, 2011, the Company maintained restricted cash of \$2.89 million in several bank accounts, of which \$1.38 million was cash deposits from customers for securing payment from such customers no later than the warranty period expiration; \$1.48 million was deposits the Company paid to a commercial bank for the bank issuing bank acceptances to the Company's vendors and \$31,742 was deposit for letter of credit. Of the total restricted cash at December 31, 2011, \$2.69 million will be released to the Company within one year. As of December 31, 2010, the Company maintained restricted cash of \$2.5 million in several bank accounts, of which \$1.05 million was cash deposits from customers for securing payment from such customers no later than the warranty period expiration and \$1.40 million was deposits the Company paid to a commercial bank for the bank issuing bank acceptances to the Company's vendors. Of the total restricted cash at December 31, 2010, \$1.9 million will be released to the Company within one year.

The following table presents in U.S. dollars ("USD") the amount of cash and cash equivalents held by the Company as of December 31, 2011 and 2010, based on the jurisdiction of deposit. The Company's U.S. parent holds cash and cash equivalents in U.S. bank accounts denominated in USD.

As of December 31, 2011	United States	China	Germany	Total
Cash in bank	\$ 282,359	\$ 10,555,706	\$ 1,570,632	\$ 12,408,697
Cash on hand	-	11,225	-	11,225
Total cash	\$ 282,359	\$ 10,566,931	\$ 1,570,632	\$ 12,419,922
As of December 31, 2010				
Cash in bank	\$ 33,299,040	\$ 23,500,804	\$ -	\$ 56,799,844
Cash on hand	-	6,627	-	6,627
Total cash	\$ 33,299,040	\$ 23,507,431	\$ -	\$ 56,806,471

## Accounts and Retentions Receivable

The Company maintains reserves for potential credit losses on accounts receivable. Management reviews the composition of accounts receivable and analyzes historical bad debts, customer concentrations, customer credit worthiness, current economic trends and changes in customer payment patterns to evaluate the adequacy of these reserves. Based on historical collection activity, the Company had allowances of \$10.58 million and \$2.3 million at December 31, 2011 and 2010, respectively.

At December 31, 2011 and 2010, the Company had retentions receivable from customers for product quality assurance of \$4.3 million and \$3.6 million, respectively. The retention rate varies from 5% to 20% of the sales price with variable terms from 3 to 24 months depending on the shipping date, and for PHE Units, the customer acceptance date, of the products and the number of heating seasons that the warranty period covers.

Accounts receivable is net of unearned interest of \$57,828 and \$81,041 at December 31, 2011 and 2010, respectively. Unearned interest is imputed interest on accounts receivable with due dates over 1 year from the invoice date discounted at the Company's borrowing rate: 6.56% at December 31, 2011 and 5.81% at December 31, 2010.



Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Advance to Suppliers

The Company makes advances to certain vendors to purchase its material. The advances are interest-free and unsecured.

Inventories

Inventories are valued at the lower of cost or market, with cost determined on a moving weighted-average basis. Cost of work in progress and finished goods comprises direct material, direct labor and an allocated portion of production overheads.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Expenditures for maintenance and repairs are expensed as incurred; additions, renewals and betterments are capitalized. When property and equipment are retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the respective accounts and any gain or loss is included in operations. Depreciation of property and equipment is provided using the straight-line method with a 10% salvage value and estimated lives as follows:

Building	20 years
Vehicles	5 years
Office equipment	5 years
Production equipment	5-10 years

Land Use Rights

Right to use land is stated at cost less accumulated amortization. Amortization is provided using the straight-line method over 50 years.

Impairment of Long-Lived Assets

Long-lived assets, which include tangible assets, such as property, plant and equipment, goodwill and other intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable.

Recoverability of long-lived assets to be held and used is measured by comparing the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized based on the excess of the carrying amount over the fair value of the assets. Fair value generally is determined using the asset's expected future discounted cash flows or market value, if readily determinable. The Company evaluates goodwill and intangible assets with indefinite lives for impairment annually using a two-step approach. Based on this valuation approach, the Company concluded that the entire goodwill balance of \$6.06 million for SmartHeat Pump and \$2.90 million of the SmartHeat Germany goodwill balance was impaired as of December 31, 2011, as discussed following under Goodwill. Based on its review, the Company believes that, as of December 31, 2011 and 2010, there were no significant impairments of its other long-lived assets.





Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

## Warranties

The Company offers to all customers standard warranties on its products for one or two heating seasons depending on the terms negotiated. The Company accrues for warranty costs based on estimates of the costs that may be incurred under its warranty obligations. The warranty expense and related accrual is included in the Company's selling expenses and other payables respectively, and is recorded when revenue is recognized. Factors that affect the Company's warranty liability include the number of units sold, its estimates of anticipated rates of warranty claims, costs per claim and estimated support labor costs and the associated overhead. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary.

Activity in the Company's warranty reserve as of and during the years ended December 31, 2011 and 2010, is as follows:

	2011	2010
Beginning balance	\$ 398,292	\$ 675,562
Provisions	620,722	(277,270)
Actual costs incurred	(503,202)	-
Ending balance in current liabilities (See Note 10)	\$ 515,812	\$ 398,292

In 2010, the Company changed estimates on warranty reserve from 1% to 0.3% of net sales of Taiyu. As a result of this change, the effect to net income for 2010 would be higher by approximately \$571,000 and EPS would be higher by \$0.02.

## Research and Development Costs

Research and development costs are expensed as incurred and included in general and administrative expenses. These costs primarily consist of cost of materials used, salaries paid for the Company's development department and fees paid to third parties. Research and development costs for 2011 and 2010 were \$1,799,421 and \$1,888,763, respectively.

## Income Taxes

The Company utilizes Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes" (codified in FASB ASC Topic 740), which requires recognition of deferred tax assets and liabilities for expected future tax consequences of events included in the financial statements or tax returns. Under this method, deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each period end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

The Company follows the provisions of FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" (codified in FASB ASC Topic 740). When tax returns are filed, it is likely that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is

recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheets along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

F-11

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Interest associated with unrecognized tax benefits is classified as interest expense and penalties are classified as selling, general and administrative expense in the statements of income. At December 31, 2011, the Company had not taken any significant uncertain tax position on its tax return for 2011 and prior years or in computing its tax provision for 2011.

Revenue Recognition

The Company's revenue recognition policies are in compliance with SEC Staff Accounting Bulletin ("SAB") 104 (codified in FASB ASC Topic 605). Sales revenue is recognized when PHEs, heat meters and heat pumps are delivered, and for PHE Units when customer acceptance occurs, the price is fixed or determinable, no other significant obligations of the Company exist and collectability is reasonably assured. Payments received before all of the relevant criteria for revenue recognition met are recorded as unearned revenue under "Advance from customers."

The Company's sales generally provide for 30% of the purchase price on placement of an order, 30% on delivery, 30% upon installation and acceptance of the equipment after customer testing and 10% no later than the termination of the standard warranty period, which ranges from 3 to 24 months from the acceptance date.

Sales revenue is the invoiced value of goods, net of value-added tax ("VAT"). All of the Company's products sold in the PRC are subject to a VAT of 17% of the gross sales price. This VAT may be offset by the VAT paid by the Company on raw materials and other materials purchased in China and included in the cost of producing the Company's finished product. The Company recorded VAT payable and VAT receivable net of payments in the financial statements. The VAT tax return is filed offsetting the payables against the receivables. SmartHeat Germany, the Company's German subsidiary, is subject to 19% VAT.

Sales and purchases are recorded net of VAT collected and paid as the Company acts as an agent for the government. VAT taxes are not affected by the income tax holiday.

Sales returns and allowances were \$0 for the 2011 and 2010. The Company does not provide a right of return, price protection or any other concessions to its customers.

The Company provides a standard warranty to all customers, which is not considered an additional service; rather, an integral part of the product's sale. The Company believes the existence of its standard product warranty in a sales contract does not constitute a deliverable in the arrangement and thus there is no need to apply the EITF 00-21 (codified in FASB ASC Topic 605-25) separation and allocation model for a multiple deliverable arrangement. SFAS 5 (codified in FASB ASC Topic 450) specifically addresses the accounting for standard warranties and neither SAB 104 nor EITF 00-21 supersedes SFAS 5. The Company believes that accounting for its standard warranty pursuant to SFAS 5 does not impact revenue recognition because the cost of honoring the warranty can be reliably estimated.

The Company charges for after-sales services provided after the expiration of the warranty period, with after-sales services mainly consisting of cleaning PHEs and repairing and exchanging parts. The Company recognizes such revenue when service is provided. For 2011 and 2010, revenue from after-sales services after the expiration of the warranty period was \$447,260 and \$86,000, respectively, which was recorded in other income.

Cost of Goods Sold

Cost of goods sold consists primarily of material costs and direct labor and manufacturing overhead that are directly attributable to the products. Write-down of inventories to the lower of cost or market is also recorded in cost of goods sold.

F-12

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Advance from Customers

The Company records payments received from customers in advance of their orders to advance account. These orders normally are delivered within a reasonable period of time based upon contract terms with the customers.

Concentration of Credit Risk

Cash includes cash on hand and demand deposits in accounts maintained within China. Balances at financial institutions within China are not covered by insurance. The Company has not experienced any losses in such accounts.

Certain other financial instruments, which subject the Company to concentration of credit risk, consist of accounts and other receivables. The Company does not require collateral or other security to support these receivables. The Company conducts periodic reviews of its customers' financial condition and customer payment practices to minimize collection risk on accounts receivable.

The operations of the Company are located primarily in China. Accordingly, the Company's business, financial condition and results of operations may be influenced by the political, economic and legal environments in China, as well as by the general state of the PRC economy.

Goodwill

Goodwill is the excess of purchase price and related costs over the value assigned to the net tangible and identifiable intangible assets of businesses acquired. In accordance with SFAS No. 142, "Goodwill and Other Intangible Assets" ("Statement No. 142"), codified in ASC Topic 350, goodwill is not amortized but is tested for impairment, annually or when circumstances indicate a possible impairment may exist. Impairment testing is performed at a reporting unit level. An impairment loss generally would be recognized when the carrying amount of the reporting unit exceeds its fair value, with the fair value of the reporting unit determined using discounted cash flow ("DCF") analysis. A number of significant assumptions and estimates are involved in the application of the DCF analysis to forecast operating cash flows, including the discount rate, the internal rate of return and projections of realizations and costs to produce. Management considers historical experience and all available information at the time the fair values of its reporting units are estimated.

The excess of the purchase price for SmartHeat Germany over the fair value of the net assets acquired of \$5.1 million (EUR 3.69 million at acquisition date) was recorded as goodwill. The excess of the purchase price for SmartHeat Pump over the fair value of the net assets acquired of \$5.6 million was recorded as goodwill.

The Company performed annual goodwill impairment assessment for SmartHeat Germany and SmartHeat Pump as of December 31, 2011. The goodwill balance prior to the impairment charge was \$10.97 million and was established primarily as a result of the acquisitions of SmartHeat Germany and SmartHeat Pump in 2011. The Company completed the step one analysis using discounted cash flow ("DCF"), which involved comparing the fair value of the reporting unit with the unit's book value. The DCF method uses revenue and expense projections and risk-adjusted discount rates. The process of determining fair value is subjective and requires management to exercise judgment in determining future growth rates, discount and tax rates and other factors. The current economic environment has impacted the Company's ability to forecast future demand and has in turn resulted in the use of higher discount rates, reflecting the risk and uncertainty in current markets. The results of the step one analysis indicated potential

impairment in the SmartHeat Germany and SmartHeat Pump reporting units corroborated by a combination of factors including a decline in the market capitalization, which is below the book value, and the deteriorating macro environment, which has resulted in a decline in expected future demand. The Company therefore performed the second step of the goodwill impairment assessment to quantify the amount of impairment. This process involved calculating the implied fair value of goodwill, determined in a manner similar to a purchase price allocation, and comparing the residual amount to the carrying amount of goodwill. This analysis incorporated the declining market capitalization in 2011 and the significant end market deterioration and economic uncertainties impacting expected future demand, including the continued tightened fiscal policy in China and difficulties in obtaining bank leasing loans that have contributed to a general slowdown in many sectors of China's economy and caused the abandonment of certain projects by the Company's customers, which in turn resulted in an unexpected cancelation of orders and delays in the performance of PHE Unit and PHE contracts. Based on this analysis, the Company concluded that the entire goodwill balance of \$6.06 million for SmartHeat Pump and \$2.90 million of the SmartHeat Germany goodwill balance was impaired as of December 31, 2011. The goodwill impairment charge is non-cash in nature. The goodwill impairment charge is not deductible for income tax purposes and, therefore, the Company has not recorded a corresponding tax benefit in 2011.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

## Statement of Cash Flows

In accordance with SFAS No. 95, "Statement of Cash Flows," codified in FASB ASC Topic 230, cash flows from the Company's operations are calculated based upon the local currencies. As a result, amounts shown on the statement of cash flows may not necessarily agree with changes in the corresponding asset and liability on the balance sheet.

## Basic and Diluted Earnings (Loss) per Share (EPS)

Basic EPS is computed by dividing income available to common shareholders by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly, 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. Diluted EPS are based on the assumption that all dilutive convertible shares and stock options were converted or exercised. Dilution is computed by applying the treasury stock method. Under this method, options and warrants are assumed to have been exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period.

The following table presents a reconciliation of basic and diluted earnings (loss) per share for 2011 and 2010:

	2011	2010
Net income (loss)	\$ (23,960,187)	\$ 22,698,443
Weighted average shares outstanding - basic	3,867,578	3,341,942
Effect of dilutive securities:		
Unexercised warrants and options	-	34,268
Weighted average shares outstanding - diluted	3,867,578	3,345,368
Earnings (loss) per share - basic	\$ (6.20)	\$ 6.79
Earnings (loss) per share - diluted	\$ (6.20)	\$ 6.79

Basic and diluted earnings (loss) per share are the same for 2011, because the common stock equivalent of the convertible securities outstanding, consisting of unexercised warrants issued to investors and options issued to the Company's directors and an officer, are antidilutive and, accordingly, were excluded from the computation of diluted earnings (loss) per share. At December 31, 2011 and 2010, options to purchase 6,000 shares of common stock were outstanding; 3,500 and 666 shares of common stock were exercisable, respectively, and warrants to purchase 0 and 9,678 shares of common stock were outstanding and exercisable, respectively.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Fair Value of Financial Instruments

For certain of the Company's financial instruments, including cash and equivalents, restricted cash, accounts receivable, accounts payable, accrued liabilities and short-term debt, the carrying amounts approximate their fair values due to their short maturities. ASC Topic 820, "Fair Value Measurements and Disclosures," requires disclosure of the fair value of financial instruments held by the Company. ASC Topic 825, "Financial Instruments," defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.

Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The Company analyzes all financial instruments with features of both liabilities and equity under ASC 480, "Distinguishing Liabilities from Equity," and ASC 815.

As of December 31, 2011 and 2010, the Company did not identify any assets and liabilities that are required to be presented on the balance sheet at fair value.

Foreign Currency Translation and Comprehensive Income (Loss)

The accounts of the U.S. parent company are maintained in USD. The functional currency of the Company's China subsidiaries is the Chinese Yuan Renminbi ("RMB") and the functional currency of SmartHeat Germany, the Company's subsidiary in Germany, is the Euro ("EUR"). The accounts of the China subsidiaries and German subsidiary were translated into USD in accordance with SFAS No. 52, "Foreign Currency Translation" (codified in FASB ASC Topic 830). According to SFAS No. 52, all assets and liabilities were translated at the exchange rate on the balance sheet date, stockholders' equity was translated at the historical rates and statement of operations items were translated at the average exchange rate for the year. The resulting translation adjustments are reported under other comprehensive income in accordance with SFAS No. 130, "Reporting Comprehensive Income" (codified in FASB ASC Topic 220).

The RMB to USD exchange rates in effect as of December 31, 2011 and 2010, were RMB6.3009 = \$1 and RMB6.6227 = \$1, respectively. The weighted-average RMB to USD exchange rates in effect for the years ended December 31, 2011 and 2010, were RMB6.4588 = \$1 and RMB6.7695 = \$1, respectively. The exchange rates used in translation from RMB to USD were published by the People's Bank of the People's Republic of China.



The EUR to USD exchange rate in effect as of December 31, 2011, was EUR0.7722 = \$1. The weighted-average EUR to USD exchange rate in effect for the year ended December 31, 2011, was EUR0.7577 = \$1. The exchange rates used in translation from EUR to USD were published by OANDA Rates.

F-15

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

### Stock-Based Compensation

The Company accounts for its stock-based compensation in accordance with SFAS No. 123R, “Share-Based Payment, an Amendment of FASB Statement No. 123” (codified in FASB ASC Topics 718 and 505). The Company recognizes in the income statement the grant date fair value of stock options and other equity-based compensation issued to employees and non-employees.

### Segment Reporting

SFAS No. 131, “Disclosures about Segments of an Enterprise and Related Information” (codified in FASB ASC Topic 280), requires use of the “management approach” model for segment reporting. The management approach model is based on the way a company’s management organizes 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.

SFAS No. 131 has no effect on the Company’s financial statements as management determined that substantially all of the Company’s operations are conducted in one industry segment.

The following table sets forth a summary of sales by product line for 2011 and 2010:

	2011	2010
	(in millions)	
PHEs	\$ 32.59	\$ 60.22
PHE Units	23.42	55.44
Heat meters	6.54	9.75
Heat pumps	2.67	-
	\$ 65.22	\$ 125.41

### Reclassifications

Certain prior year amounts were reclassified to conform to the presentation in the current year, including reclassification of \$512,178 to noncurrent from current advance to supplier.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

## New Accounting Pronouncements

In September 2011, FASB issued ASU 2011-08, "Testing Goodwill for Impairment." ASU 2011-08 will allow companies to assess qualitative factors to determine if it is more-likely-than-not that goodwill might be impaired and whether it is necessary to perform the two-step goodwill impairment test required under current accounting standards. ASU 2011-08 will be effective for annual and interim goodwill impairment tests performed for annual reporting period beginning after December 15, 2011, with early adoption permitted. The adoption of this ASU did not have a material impact on the Company's consolidated financial statements.

In June 2011, FASB issued ASU 2011-05, "Comprehensive Income: Presentation of Comprehensive Income." ASU 2011-05 will require companies to present the components of net income and other comprehensive income either as one continuous statement or as two consecutive statements. ASU 2011-05 eliminates the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity. ASU 2011-05 does not change the items that must be reported in other comprehensive income, how such items are measured or when they must be reclassified to net income. ASU 2011-05 will be effective for the first interim and annual periods beginning after December 15, 2011. Further, in December 2011, the FASB issued ASU 2011-12, "Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05." The Company believes the adoption of this guidance concerns disclosure only and will not have a material impact on its consolidated financial statements.

In May 2011, FASB issued ASU 2011-04, "Fair Value Measurement: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." ASU 2011-04 changes the wording used to describe the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements in order to improve consistency in the application and description of fair value between U.S. GAAP and International Financial Reporting Standards ("IFRS"). ASU 2011-04 clarifies how the concepts of highest and best use and valuation premise in a fair value measurement are relevant only when measuring the fair value of nonfinancial assets and are not relevant when measuring the fair value of financial assets or of liabilities. In addition, ASU 2011-04 expanded the disclosures for the unobservable inputs for Level 3 fair value measurements, requiring quantitative information to be disclosed related to (1) the valuation processes used, (2) the sensitivity of the fair value measurement to changes in unobservable inputs and the interrelationships between those unobservable inputs, and (3) use of a nonfinancial asset in a way that differs from the asset's highest and best use. ASU 2011-04 will be effective for the first interim and annual reporting periods beginning after December 15, 2011 and early adoption is prohibited. The Company is currently evaluating the future impact of this new accounting update on its consolidated financial statements.

## 3. INVENTORIES

Inventories at December 31, 2011 and 2010, were as follows:

	2011	2010
Raw materials	\$ 39,280,141	\$ 15,803,040
Work in process	6,496,349	3,157,799
Finished goods	11,699,008	7,624,523
Total	57,465,498	26,585,362
Inventory provision	(3,826,949)	-

Net

\$ 53,648,549 \$ 26,585,362

F-17

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

## 4. NOTES RECEIVABLE – BANK ACCEPTANCES

The Company sold goods to its customers and received commercial notes (bank acceptance) from them in lieu of payments for accounts receivable. The Company discounted the commercial notes with the bank or endorsed the commercial notes to vendors for payment of their own obligations or to get cash from third parties. Most of the commercial notes have a maturity of less than six months. As of December 31, 2011, the Company is contingently liable for the notes endorsed to vendors of \$214,260.

## 5. PROPERTY AND EQUIPMENT, NET

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

	2011	2010
Building	\$ 4,789,152	\$ 4,556,445
Production equipment	7,390,356	3,923,521
Office equipment	1,012,545	794,816
Vehicles	916,320	711,798
Total	14,108,373	9,986,580
Less: accumulated depreciation	(2,759,772)	(1,605,561)
Net	\$ 11,348,601	\$ 8,381,019

Depreciation expense for 2011 and 2010 was \$1,092,000 and \$720,000, respectively.

## 6. OTHER RECEIVABLES, PREPAYMENTS AND DEPOSITS

Other receivables, prepayments and deposits consisted of the following at December 31, 2011 and 2010, respectively:

	2011	2010
Advance to third parties	\$ 4,473,539	\$ 2,076,862
Deposit for public bids of sales contracts	617,088	846,739
Deposit for acquisition of SmartHeat Pump	-	1,834,600
Prepayment for freight, related, insurance, and consulting expenses	238,855	115,542
Other deposits	91,988	53,289
Advance to employees	351,847	600,427
Other	890,013	774,313
Total	\$ 6,663,330	\$ 6,301,772

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Advance to third parties were short-term advances to unrelated parties with payment usually due within a year and includes an advance to Siping Beifang of RMB 22 million (\$3.5 million) that is non-interest bearing and with due date extended to September 30, 2012. Deposits for public bidding represented the deposits for bidding on expected contracts, which will be returned to the Company after the bidding process is completed, usually within three to four months from the payment date. Prepayment for freight and related insurance expenses represented prepaid shipping and freight insurance expenses for customers and is generally repaid upon customer receipt of products. Other deposits mainly consisted of deposits for rents, payroll expense and utilities. Advance to employees represented short-term loans to employees and advances for business trips and related expenses. Other receivables, prepayments and deposits are reimbursed or settled within 12 months.

## 7. INTANGIBLE ASSETS

Intangible assets consisted mainly of land use rights, trademark, computer software, know-how technology, customer list and covenant not to compete. All land in the PRC is government-owned and cannot be sold to any individual or company. However, the government grants the user a "land use right" to use the land. The Company acquired land use rights during 2005 for \$440,000 (RMB 3,549,682). In June 2009, the Company acquired land use rights for \$3.1 million from Siping Beifang. In November 2010, the Company's subsidiary, SmartHeat Energy, acquired land use rights for \$10.1 million. The Company has the right to use the land for 50 years and is amortizing such rights on a straight-line basis for 50 years.

Intangible assets consisted of the following at December 31, 2011 and 2010, respectively:

	Estimated Useful Life (In years)	2011	2010
Land use rights	50	\$ 14,676,483	\$ 13,884,020
Know-how technology	5 – 10	881,915	275,345
Customer list	5	207,885	197,784
Covenant not to compete	5	113,089	107,593
Software	5	517,474	403,680
Trademark	7	288,883	-
<b>Total</b>		<b>16,685,729</b>	<b>14,868,422</b>
Less: accumulated amortization		(1,265,924)	(624,688)
<b>Net</b>		<b>\$ 15,419,805</b>	<b>\$ 14,243,734</b>

Amortization of intangible assets for 2011 and 2010 was \$586,450 and \$291,700, respectively. Annual amortization for the next five years from December 31, 2011, is expected to be \$597,000, \$525,000, \$440,000, \$415,000 and \$405,000.

## 8. CONSTRUCTION IN PROGRESS

The Company had construction in progress of \$522,876 at December 31, 2011, with two ongoing projects. SmartHeat Energy is building a factory with a total estimated cost of \$9 million, of which the Company has paid \$455,000 as of

December 31, 2011. The Company temporarily halted construction on this factory because of the current economic and market conditions in China. SmartHeat Siping has a construction project of \$68,000 for the laying of a foundation for its machinery installation. This foundation project will be completed in beginning of 2012, with remaining cost to complete of \$21,000.

F-19

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

## 9. TAXES PAYABLE

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

	2011	2010
Income tax payable	\$ 182,560	\$ 1,866,569
Value-added tax payable	962,903	117,779
Other taxes payable	33,248	16,108
Total taxes payable	\$ 1,178,712	\$ 2,000,456

## 10. ACCRUED LIABILITIES AND OTHER PAYABLES

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

	2011	2010
Advance from third parties	\$ 981,658	\$ 132,890
Payable to Siping Beifang	1,377,060	1,238,166
Other payables	681,810	952,593
Warranty reserve (See Note 2)	515,812	398,292
Accrued expenses	579,958	317,840
Total	\$ 4,136,298	\$ 3,039,701

Advance from third parties were short-term, non-interest-bearing advances from third parties. Other payables consisted of payables for the Company's miscellaneous expenses including postage, business insurance, employee benefits, bidding fee, etc. Accrued expenses mainly consisted of accrued purchases, interest and utility.

## 11. NOTES PAYABLE – BANK ACCEPTANCES

Notes payable represented the conversion of accounts payable into notes payable, which were issued by a bank. The Company deposited a portion of the acceptance amount into the bank as collateral. The terms of the notes range from 3-6 months and bear no interest. At December 31, 2011 and 2010, the Company deposited \$1.48 million and \$1.40 million with the bank as restricted cash for the bank issuing the notes. The restricted cash is refundable when the notes are repaid.



Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

## 12. LOANS PAYABLE - BANK

## Short-Term Loans

The Company was obligated for the following short-term loans as of December 31, 2011 and 2010:

	2011	2010
From a commercial bank in the PRC for RMB 17,000,000 entered into on June 1, 2010. The loan bore interest at 5.31% with maturity on June 30, 2011. The loan was guaranteed by a third party. The loan was paid in full when it matured.	\$ -	\$ 2,566,929
From a commercial bank in the PRC for RMB 13,000,000 entered into on August 9, 2010. The loan bore interest at 5.31% with maturity on June 30, 2011. The Company pledged its building and land use rights for this loan. The loan was paid in full when it matured.	-	1,962,946
From a commercial bank in the PRC for RMB 25,000,000 entered into on October 18, 2010. The loan currently bears interest at 7.22% with maturity on October 17, 2011, and was renewed until September 13, 2012. The loan was pledged by bank deposit.	3,967,687	3,774,895
From a commercial bank in the PRC for RMB 5,000,000 entered into on October 19, 2010. The loan bore interest at 6.94% with maturity on October 18, 2011 but was repaid in September 2011. The loan was pledged by bank deposit.	-	754,979
From a commercial bank in the PRC for RMB 10,000,000 entered into on June 27, 2011. The loan currently bears interest at 7.57% with maturity on June 27, 2012. The loan was pledged by bank deposit.	1,587,075	-
From a commercial bank in the PRC for RMB 3,000,000 entered into on June 30, 2011. The loan currently bears interest at 6.63% with maturity on June 29, 2012. The loan was guaranteed by a third party.	476,122	-
From a commercial bank in the PRC for RMB 5,000,000 entered into on July 6, 2011. The loan currently bears interest at 6.63% with maturity on July 5, 2012. The loan was guaranteed by a third party.	793,537	-
From a commercial bank in the PRC for RMB 3,000,000 entered into on July 15, 2011. The loan currently bears interest at 6.89% with maturity on July 14, 2012. The loan was guaranteed by a third party.	476,122	-
From a commercial bank in the PRC for RMB 1,600,000 entered into on August 1, 2011. The loan currently bears interest at 6.89% with maturity on July 31, 2012. The loan was guaranteed by a third party.	253,932	-
From a commercial bank in the PRC for RMB 3,300,000 entered into August 16, 2011. The loan currently bears interest at 6.89% with maturity on August 15, 2012. The loan was guaranteed by a third party.	523,737	-
From a commercial bank in the PRC for RMB 1,100,000 entered into on August 23, 2011. The loan currently bears interest at 6.89% with maturity on August 22, 2012. The loan was guaranteed by a third party.	174,578	-
	793,537	-

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From a commercial bank in the PRC for RMB 5,000,000 entered into on September 21, 2011. The loan currently bears interest at 7.22% with maturity on September 20, 2012. The loan was pledged by bank deposit.

From a commercial bank in the PRC for RMB 10,000,000 entered into on November 8, 2011. The loan currently bears interest at 7.872% with maturity on November 2, 2012. The loan was guaranteed by Taiyu.

	1,587,075	-
\$	10,633,402	\$ 9,059,749

F-21

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Of the loans listed above that are guaranteed by a third party, the guarantees were provided by the same third party company, the guarantee term is one year and the Company is not required to pay for this guarantee service as the Company provides the same guarantee service to loans of the third party company in return. As of December 31, 2011, the Company has signed a contract to provide guarantees of up to RMB 30 million (\$4.8 million) in loans for this third party company.

#### Long-Term Bank Loan

On December 12, 2011, the Company entered into a long-term loan agreement with a commercial bank for RMB 13,000,000 (\$2.06 million), bearing interest of 6.65%, with a maturity date of October 26, 2013. The loan was pledged with building and land.

#### 13. DEFERRED TAX ASSET (LIABILITY)

Deferred tax asset (liability) represented differences between the tax bases and book bases of property and equipment and intangible assets arising from the acquisition of SanDeKe and SmartHeat Pump, and bad debt allowance booked by the Company which was not allowed per tax purpose. As of December 31, 2011, and 2010, deferred tax asset (liability) consisted of the following:

	2011	2010
Deferred tax asset - current (bad debt allowance)	\$ 1,794,878	\$ 380,232
Deferred tax asset - current (inventory provision)	571,865	-
Less: valuation allowance	(2,366,743)	-
Deferred tax asset - current, net	-	380,232
Deferred tax asset - noncurrent (depreciation of fixed assets)	-	22,266
Deferred tax liability - noncurrent (depreciation of fixed assets)	\$ 189,516	\$ -

#### 14. INCOME TAXES

The Company is subject to income taxes by entity on income arising in or derived from the tax jurisdiction in which each entity is domiciled.

SmartHeat, the parent company, was incorporated in the U.S. and has net operating losses (“NOL”) for income tax purposes, which can be carried forward for up to 20 years from the year the loss is incurred. SmartHeat has NOL carry forwards for income taxes of approximately \$3.48 million at December 31, 2011, which may be available to reduce future years’ taxable income. Management believes the realization of benefits from these losses remains uncertain due to SmartHeat’s limited operating history and continuing losses. Accordingly, a 100% deferred tax asset valuation allowance has been provided.

Taiyu and SanDeKe are governed by the Income Tax Law of the PRC concerning privately-run enterprises, which are generally subject to tax at 25% on income reported in the statutory financial statements after appropriate tax adjustments. According to the new income tax law that became effective January 1, 2008, new high-tech enterprises given special support by the PRC government are subject to an income tax rate of 15%. Taiyu has been classified as a new high-tech enterprise since 2009 and eligible for an income tax rate of 15% until 2012. The high-tech enterprise status is reviewed annually by the local PRC government. SanDeKe is exempt from income tax for two years starting from its first profitable year and is entitled to a 50% discount on its income tax rate from 2010 through 2012. The income tax rate for SanDeKe is 12% and 11% for 2011 and 2010, respectively.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

SmartHeat Siping, Jinhui, SmartHeat Investment, SmartHeat Energy, SmartHeat Pump, Ruicheng and SmartHeat Trading are subject to the regular 25% PRC income tax rate. SmartHeat Germany is subject to a 15% corporate income tax in Germany.

The Company's net income for 2011, would be lower by approximately \$116,000 or \$0.03 earnings per common share, had Taiyu and SanDeKe not enjoyed a lower income tax rate for the year ended December 31, 2010.

Consolidated foreign pretax earnings approximated \$953,000 and \$28,207,000 for 2011 and 2010, respectively. Pretax earnings of a foreign subsidiary are subject to U.S. taxation when effectively repatriated. The Company provides income taxes on the undistributed earnings of non-U.S. subsidiaries except to the extent those earnings are invested indefinitely outside the United States. At December 31, 2011, \$35.1 million of accumulated undistributed earnings of non-U.S. subsidiaries was invested indefinitely. At the existing U.S. federal income tax rate, additional taxes of \$8,845,700 would have to be provided if such earnings were remitted currently.

The following table reconciles the U.S. statutory rates to the Company's effective tax (benefit) rate for 2011 and 2010:

	2011	2010
U.S. statutory rates	(34.0)%	34.0%
Tax rate difference	8.25%	(9.4)%
Effect of tax holiday	2.79%	(10.4)%
Permanent difference - goodwill impairment	6.84%	
Others	(0.21)%	0.7%
Valuation allowance	17.08%	1.8%
Tax per financial statements	0.77%	16.7%

The provision for income tax (benefit) for 2011 and 2010 consisted of the following:

	2011	2010
Income tax expense - current	\$ 269,049	\$ 4,943,728
Income tax benefit - deferred	(82,676)	(410,616)
Total income tax expense	\$ 186,373	\$ 4,533,112

#### 15. STATUTORY RESERVES AND RESTRICTED NET ASSETS

The Company's ability to pay dividends is primarily dependent on the Company receiving funds from its subsidiaries. Relevant PRC statutory laws and regulations permit payments of dividends by the Company's PRC subsidiaries only out of the subsidiary's retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. The results of operations reflected in the financial statements prepared in accordance with U.S. GAAP differ from those reflected in the statutory financial statements of the Company's PRC subsidiaries.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

In accordance with the PRC Regulations on Enterprises with Foreign Investment and their articles of association, a foreign invested enterprise (“FIE”) established in the PRC is required to provide certain statutory reserves, which are appropriated from net profit as reported in the FIE’s PRC statutory accounts. An FIE is required to allocate at least 10% of its annual after-tax profit to the surplus reserve until such reserve has reached 50% of its respective registered capital based on the FIE’s PRC statutory accounts. Appropriations to other funds are at the discretion of the board of directors for all FIEs. The aforementioned reserves can only be used for specific purposes and are not distributable as cash dividends. Additionally, shareholders of an FIE are required to contribute capital to satisfy the registered capital requirement of the FIE. Until such contribution of capital is satisfied, the FIE is not allowed to repatriate profits to its shareholders, unless otherwise approved by the State Administration of Foreign Exchange. Taiyu, SanDeKe, SmartHeat Siping, Jinhui, SmartHeat Investment and Ruicheng were established as FIEs and therefore are subject to the above-mandated restrictions on distributable profits. As of December 31, 2011, the Company has met all registered capital requirements for its FIEs except for SmartHeat Investment, for which the Company is committed to contribute an additional \$40 million in registered capital by April 2015 (see Note 17).

Additionally, in accordance with the Company Law of the PRC, a domestic enterprise is required to provide surplus reserve at least 10% of its annual after-tax profit until such reserve has reached 50% of its respective registered capital based on the enterprise’s PRC statutory accounts. A domestic enterprise is also required to provide discretionary surplus reserve, at the discretion of the board of directors, from the profits determined in accordance with the enterprise’s PRC statutory accounts. The aforementioned reserves can only be used for specific purposes and are not distributable as cash dividends. SmartHeat Energy, SmartHeat Trading and SmartHeat Pump were established as domestic enterprises and therefore are subject to the above-mentioned restrictions on distributable profits.

As a result of these PRC laws and regulations that require annual appropriations of 10% of after-tax income to be set aside prior to payment of dividends as general reserve fund, the Company’s PRC subsidiaries are restricted in their ability to transfer a portion of their net assets to the Company as a dividend.

## 16. STOCKHOLDERS’ EQUITY

### Common Stock with Warrants Issued for Cash

In August 2008, the Company sold 163,000 units consisting of one share of the Company’s common stock and a 3-year warrant to purchase 15% of one share of the Company’s common stock for \$60.00 per share, at \$35.00 per unit, for approximately \$5.7 million. The Company issued warrants to purchase 24,450 shares of its common stock. In connection with the private placement, the Company paid commissions of \$340,000 and issued warrants to purchase 14,850 shares of its common stock to placement agents. The warrants are immediately exercisable and expire on the third anniversary of their issuance. The warrants require the Company to settle in its own shares. There is no provision for cash settlement, except in lieu of fractional shares. Net proceeds of \$5.1 million were received by the Company. The value of warrants was determined by using the Black-Scholes pricing model with the following assumptions: discount rate – 2.76%; dividend yield – 0%; expected volatility – 15%; and term of 3 years. The value of the warrants was \$70,246. During 2010, warrants to purchase 1,425 shares were exercised at \$60.00 per share for \$85,500. All outstanding warrants expired unexercised on August 22, 2011.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Following is a summary of the warrant activity:

	Number of Shares	Average Exercise Price per Share	Weighted Average Remaining Contractual Term in Years
Outstanding at December 31, 2009	11,103	\$ 60.00	1.51
Exercisable at December 31, 2009	11,103	\$ 60.00	1.51
Granted	-	-	-
Exercised	(1,425)	-	-
Forfeited	-	-	-
Outstanding at December 31, 2010	9,678	\$ 60.00	0.51
Exercisable at December 31, 2010	9,678	\$ 60.00	0.51
Granted	-	-	-
Exercised	-	-	-
Forfeited	-	-	-
Expired	(9,678)	-	-
Outstanding at December 31, 2011	-	\$ -	-
Exercisable at December 31, 2011	-	\$ -	-

#### Stock Options to Independent Directors and Employee

On July 17, 2008, the Company granted non-statutory stock options to each of its two independent U.S. directors. The terms of each option are 1,000 shares at an exercise price per share of \$46.00, with a life of five years and vesting over three years as follows: 333 shares vest on July 17, 2009; 333 shares vest on July 17, 2010; and 334 shares vest on July 17, 2011, subject in each case to the director continuing to be associated with the Company as a director. The options were valued using a volatility of 15%, risk-free interest rate of 2.76%, and dividend yield of 0%. No estimate of forfeitures was made as the Company has a short history of granting options.

On July 31, 2009, one of the Company's independent U.S. directors voluntarily retired. As such, he forfeited his right to his unvested options to purchase 667 shares. Upon his termination as director, any vested portion of the grant remained exercisable for 90 days following termination under the terms of the option grant. Accordingly, the 333 vested options expired unexercised as of October 29, 2009.

On February 1, 2010, the Company issued stock options to an employee. The terms of the options are 5,000 shares at an exercise price per share of \$118.50, with a life of five years and vesting over two years as follows: 2,500 shares vest on June 30, 2011, and 2,500 shares vest on June 29, 2012. The options were valued using a volatility of 74%, risk free interest rate of 2.76%, and dividend yield of 0%. The grant-date fair value of the options was \$367,107.

F-25

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Based on the fair value method under SFAS No. 123 (Revised), "Share Based Payment" ("SFAS 123(R)") (codified in FASB ASC Financial Instruments, Topic 718 & 505), the fair value of each stock option granted is estimated on the date of the grant using the Black-Scholes option pricing model. The Black-Scholes option pricing model has assumptions for risk-free interest rates, dividends, stock volatility and expected life of an option grant. The risk-free interest rate is based upon market yields for U.S. Treasury debt securities at a maturity near the term remaining on the option. Dividend rates are based on the Company's dividend history. The stock volatility factor is based on the historical volatility of the Company's stock price. The expected life of an option grant is based on management's estimate. The fair value of each option grant to independent directors is calculated by the Black-Scholes method and is recognized as compensation expense over the vesting period of each stock option award.

Following is a summary of the option activity:

	Number of Shares	Average Exercise Price per Share	Weighted Average Remaining Contractual Term in Years
Outstanding at December 31, 2009	1,000	\$ 46.00	3.54
Exercisable at December 31, 2009	333	\$ 46.00	3.54
Granted	5,000	118.50	5.00
Exercised	-	-	-
Forfeited	-	-	-
Outstanding at December 31, 2010	6,000	\$ 103.20	3.76
Exercisable at December 31, 2010	666	\$ 46.00	2.54
Granted	-	-	-
Exercised	-	-	-
Forfeited	-	-	-
Outstanding at December 31, 2011	6,000	\$ 106.40	2.83
Exercisable at December 31, 2011	3,500	\$ 97.80	2.65

There were no options exercised during 2011 and 2010. The Company recorded \$141,114 and \$195,083 as compensation expense for stock options during 2011 and 2010, respectively.

On April 18, 2011, the Company issued 5,000 shares of stock to an employee as a bonus. The Company recorded \$150,500 as stock compensation expense during 2011.

On November 28, 2011, the Company issued 95,000 shares of stock to four employees as bonus. The Company recorded \$408,500 as stock compensation expense during 2011.



Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

Stock Issued for Consulting Service

On January 1, 2010, the Company entered into a one-year service agreement with a consultant to provide business development assistance and engineering advice regarding the sales and marketing of the Company's products. On July 16, 2010, the Company and consultant amended the compensation terms under the consulting agreement. The Company compensated the consultant on a quarterly basis at \$6,250 and 50 restricted shares of the Company's common stock in 2010. Starting from 2011, the Company compensated the consultant on a quarterly basis at \$6,250. In October 2011, the Company terminated the consulting agreement with the consultant under mutual consent. The Company paid \$18,650 to the consultant in 2011.

17. COMMITMENTS

Employment Agreements

On January 1, 2008, Taiyu entered into a 3-year employment agreement with Jun Wang, the Company's Chief Executive Officer, which agreement was renewed on the same terms through December 31, 2013, upon mutual agreement between Mr. Wang and Taiyu. Pursuant to the terms of his employment agreement, Mr. Wang shall receive a salary not less than the lowest minimum wage per month paid in Shenyang and shall be based on the uniform wage and incentive system in Shenyang. Effective on February 1, 2010, the Compensation Committee approved an increase in Mr. Wang's annual compensation to a base salary of \$150,000 per year.

On January 1, 2008, Taiyu entered into a 3-year employment agreement with Zhijuan Guo, the Company's Chief Financial Officer, which agreement was renewed on the same terms through December 31, 2013, upon mutual agreement between Ms. Guo and Taiyu. Pursuant to the terms of her employment agreement, Ms. Guo shall receive a salary not less than the lowest minimum wage per month paid in Shenyang and shall be based on the uniform wage and incentive system in Shenyang. In addition, Ms. Guo shall be entitled to overtime pay in accordance with the applicable law.

On February 1, 2010, SmartHeat entered into an employment agreement with Xudong Wang, the Company's Vice President of Strategy and Development, for a term ending on June 30, 2013. Mr. Wang is compensated at \$120,000 per year and eligible for annual cash bonuses at the sole discretion of the Board of Directors.

Lease Agreements

The Company leased offices for its sales representatives in several different cities in China under various one-year, non-cancellable and renewable operating lease agreements. Rental expense for 2011 and 2010 was \$365,000 and \$292,000, respectively.

Capital Contribution

The Company formed SmartHeat Investment on April 7, 2010, as an investment holding company with registered capital of \$70 million to enable its establishment and investment in new businesses in China. Under PRC company law, registered capital must be used in the operations of the domestic company within its approved business scope. SmartHeat Investment was established as a separate subsidiary of the Company to allow for the allocation of capital to new businesses in China separate from its existing subsidiaries and operations. As a PRC investment holding

company, the \$70 million in approved registered capital of SmartHeat Investment is deemed a planned investment amount for the entity, not a traditional registered capital requirement under PRC corporate law. The Company contributed \$30 million in capital to SmartHeat Investment on April 15, 2010, from proceeds of its public offering that closed on September 22, 2009. On April 12, 2010, SmartHeat Investment formed SmartHeat Energy, a wholly owned subsidiary in Shenyang with registered capital of \$30 million, subsequently satisfied out of the registered capital of SmartHeat Investment, for the research, development, manufacturing and sale of energy products. As of December 31, 2011, the Company is committed to contribute the remaining planned investment amount of \$40 million in registered capital to SmartHeat Investment by April 2015. The Company plans to satisfy this contribution through cash flow provided by operations and funds raised through offerings of its securities, if and when the Company determines such offerings are required, and at such time that the Company identifies a new acquisition, investment or business opportunity to be financed through SmartHeat Investment, although no specific investment candidate has been identified to date. If the Company is unable to make the required capital contribution to registered capital, the Company may apply to extend the payment period, typically granted for six months or more, or otherwise reduce the amount of registered capital to the amount already contributed. There is no penalty for failure to satisfy in full the approved registered capital of a PRC investment holding company.

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 DECEMBER 31, 2011 AND 2010

## 18. CONTINGENCIES

The Company's operations in the PRC are subject to specific considerations and significant risks not typically associated with companies in North America and Western Europe. These include risks associated with, among others, the political, economic and legal environments in China and foreign currency exchange. The Company's results may be adversely affected by changes in PRC government policies with respect to laws and regulations, anti-inflationary measures, currency conversion and remittance abroad and rates and methods of taxation, among other things.

The Company's sales, purchases and expense transactions in China are denominated in RMB and all of the Company's assets and liabilities in China are also denominated in RMB. The RMB is not freely convertible into foreign currencies under the current PRC law. In China, foreign exchange transactions are required by law to be transacted only by authorized financial institutions. Remittances in currencies other than RMB may require certain supporting documentation in order to affect the remittance.

## 19. ACQUISITION AND UNAUDITED PRO FORMA INFORMATION

On March 3, 2011, the Company completed the acquisition of SmartHeat Germany, a designer and manufacturer of high efficiency heat pumps. This acquisition will extend the Company's clean technology heating solutions into the rapidly growing heat pump markets in Europe and China, enabling its customers to purchase technologically advanced heat pumps at competitive prices. The purchase price was EUR 4,248,082 (\$5,898,887), which was negotiated based on a two-times multiple of SmartHeat Germany's projected net income over the three years following the acquisition, and was paid at closing.

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the date of acquisition. The fair values of the assets acquired and liabilities assumed at the closing date were used for the purpose of purchase price allocation. The Company determined that little or no identifiable intangible assets, consisting of outstanding patents, technology and customer lists, were acquired with SmartHeat Germany based on the Company's due diligence and discussions with the seller. Accordingly, the excess of the purchase price over the fair value of the net assets acquired of \$5,134,627 was recorded as goodwill.

Cash	\$ 239,686
Accounts receivable	137,185
Other receivables	24,254
Inventory	667,412
Property and equipment	350,382
Goodwill	5,134,627
Accounts payable	(536,907)
Other payables	(117,752)
Purchase price	\$ 5,898,887

On March 1, 2011, the Company entered into a purchase agreement with SmartHeat Pump, a Shenyang-based state-owned heat pump manufacturer and designer. The Company paid RMB 50 million (\$7.6 million) to acquire 95% of the equity interests in SmartHeat Pump, with a local government entity retaining the remaining 5% equity interest. The purchase price was negotiated based on a two-times multiple of the projected net income of SmartHeat Pump over the three years following the acquisition.

F-28

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Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the date of the SmartHeat Pump acquisition. The fair values of the assets acquired and liabilities assumed at the closing date were used for the purpose of purchase price allocation. The Company determined that little or no identifiable intangible assets, consisting of outstanding patents, technology and customer lists, were acquired with SmartHeat Pump based on the Company's due diligence and discussions with the seller. Accordingly, the excess of the purchase price over the fair value of the net assets acquired of \$5,629,951 (RMB 37,018,052) was recorded as goodwill.

Cash	\$ 189,438
Accounts receivable	920,463
Other receivable	263,220
Inventory	1,265,455
Property and equipment	759,341
Intangible assets	858,409
Goodwill	5,629,951
Accounts payable	(446,334)
Other payable and accrued expenses	(686,195)
Short-term loan	(760,433)
Deferred tax liability	(285,069)
Noncontrolling interest	(103,915)
Purchase price	\$ 7,604,331

The amounts of revenue and earnings (loss) of SmartHeat Germany and SmartHeat Pump since their respective acquisition dates included in the consolidated income statement for 2011 are \$1,975,332 and \$(4,247,102) for SmartHeat Germany and \$2,570,280 and \$(7,713,718) for SmartHeat Pump, respectively. The Company performed annual goodwill impairment assessment for SmartHeat Germany and SmartHeat Pump as of December 31, 2011, and concluded that the entire goodwill balance of \$6.06 million for SmartHeat Pump and \$2.90 million of SmartHeat Germany was impaired (see Note 2 - Goodwill).

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

The following unaudited pro forma consolidated results of operations for SmartHeat for 2011 and 2010 presents the operations of SmartHeat, SmartHeat Germany and SmartHeat Pump as if the acquisitions occurred at January 1, 2011 and 2010, respectively. The pro forma results are not necessarily indicative of the actual results that would have occurred had the acquisitions been completed as of the beginning of the periods presented, nor are they necessarily indicative of future consolidated results.

	2011	2010
Net sales	\$ 65,618,599	\$ 131,404,071
Cost of goods sold	44,867,287	84,890,665
Gross profit	20,751,312	46,513,406
Total operating expenses	44,137,803	21,050,701
Income (loss) from operations	(23,386,491)	25,462,705
Total non-operating income (loss)	(1,293,882)	452,949
Income (loss) before income tax	(24,680,373)	25,915,654
Income tax expense	186,381	(4,534,379 )
Net income (loss) before noncontrolling interest	(24,866,754)	21,381,275
Less: Loss attributable to noncontrolling interest	478,633	(99,774 )
Net income (loss) to SmartHeat Inc.	\$ (24,388,121)	\$ 21,481,049
Weighted average shares outstanding	3,867,578	3,341,942
Earnings (loss) per share	\$ (6.31)	\$ 6.43



Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

## 20. CONDENSED FINANCIAL INFORMATION OF U.S. PARENT

SmartHeat Inc. is a holding company and owns no operating assets and has no significant operations independent of its subsidiaries. Set forth below are condensed financial statements for SmartHeat Inc. (parent) on a stand-alone, unconsolidated basis as of December 31, 2011 and 2010.

## CONDENSED BALANCE SHEETS

	2011	2010
<b>ASSETS</b>		
Cash and equivalents	\$ 282,359	\$ 33,299,040
Investment in subsidiaries	135,529,530	115,045,013
Other current assets	3,964,675	4,999,720
<b>TOTAL ASSETS</b>	<b>\$ 139,776,564</b>	<b>\$ 153,343,773</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Accrued liabilities and other payables	\$ 2,825,237	\$ -
<b>STOCKHOLDERS' EQUITY:</b>		
Common stock	\$ 3,955	\$ 3,855
Additional paid-in capital	102,985,739	102,285,724
Statutory reserve	5,396,014	5,301,918
Other comprehensive income	11,119,887	4,252,261
Retained earnings	17,445,732	41,500,015
Total stockholders' equity	136,951,327	153,343,773
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 139,776,564</b>	<b>\$ 153,343,773</b>

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

CONDENSED STATEMENTS OF OPERATIONS

	2011	2010
Operating expenses		
General and administrative expenses	\$ 1,688,186	\$ 1,218,004
Loss from operations	(1,688,186)	(1,218,004)
Non operating income		
Other non operating expense	101,014	163,121
Equity income (loss) in subsidiaries	(22,373,014)	23,753,326
Total non-operating income (loss)	(22,272,000)	23,916,447
Income (loss) before income tax	(23,960,186)	22,698,443
Income tax	-	-
Net income (loss)	\$ (23,960,186)	\$ 22,698,443

F-32

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

CONDENSED STATEMENTS OF CASH FLOWS

	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net income (loss)	\$ (23,960,186)	\$ 22,698,443
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Stock-based compensation	141,114	195,083
Stock issued for consulting service	559,000	18,090
Equity income (loss) in subsidiaries	23,373,014	(23,753,326)
(Increase) decrease in current assets	(464,956)	(1,344,370)
Increase (decrease) in current liabilities	2,825,238	(185,178)
Net cash provided by (used in) operating activities	1,473,224	(2,371,258)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Investment in subsidiaries	(34,489,905)	(30,000,000)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from the exercise of warrants	-	85,500
Proceeds from issuance of common stock	-	27,040,742
Net cash provided by financing activities	-	27,126,242
<b>NET DECREASE IN CASH &amp; EQUIVALENTS</b>	<b>(33,016,681)</b>	<b>(5,245,016)</b>
<b>CASH &amp; EQUIVALENTS, BEGINNING BALANCE</b>	<b>33,299,040</b>	<b>38,544,056</b>
<b>CASH &amp; EQUIVALENTS, ENDING BALANCE</b>	<b>\$ 282,359</b>	<b>\$ 33,299,040</b>

Table of Contents

SMARTHEAT INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2011 AND 2010

21. SUBSEQUENT EVENTS

Effective February 7, 2012, the Company implemented a one-for-ten reverse stock split of its common stock as approved by the Board of Directors on January 19, 2012. There was no change to the authorized shares or par value of the Company's common stock as a result of the reverse stock split. Any fraction of a share of common stock that would otherwise have resulted from the reverse split was rounded up to the nearest whole number. All share amounts and per share prices have been retroactively restated to reflect the effect of this reverse stock split.

F-34

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Table of Contents

## SIGNATURES

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

Date: April 2, 2012

SMARTHEAT INC.  
 (Registrant)  
 By: /s/ Jun Wang  
 Jun Wang  
 Chief Executive Officer  
 (Principal Executive Officer)

## Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jun Wang his or her attorney-in-fact for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jun Wang Jun Wang	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	April 2, 2012
/s/ Zhijuan Guo Zhijuan Guo	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	April 2, 2012
/s/ Arnold Staloff Arnold Staloff	Director	April 2, 2012
/s/ Weiguo Wang Weiguo Wang	Director	April 2, 2012
/s/ Xin Li Xin Li	Director	April 2, 2012
/s/ Qingtai Kong Qingtai Kong	Director	April 2, 2012

Table of Contents

## EXHIBIT INDEX

Exhibit No.	Description
2.1	Share Exchange Agreement and Plan of Reorganization by and among SmartHeat Inc., Shenyang Taiyu Electronic & Machinery Co., Ltd. and the Shareholders of Shenyang Taiyu Electronic & Machinery Co., Ltd., dated April 14, 2008 (Incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on April 18, 2008)
2.2	Articles of Exchange between Shenyang Taiyu Electronic & Machinery Co., Ltd. and SmartHeat Inc., dated April 14, 2008 (Incorporated herein by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on April 18, 2008)
2.3	Articles of Merger between Pacific Goldrim Resources, Inc. and SmartHeat Inc., dated April 14, 2008 (Incorporated herein by reference to Exhibit 2.3 to the Company's Current Report on Form 8-K filed on April 18, 2008)
3.1	Articles of Incorporation (Incorporated herein by reference to Exhibit 3.1 to the Company's Form SB-2 filed on December 22, 2006)
3.2	Amended and Restated By-Laws adopted April 15, 2008 (Incorporated herein by reference to Exhibit 3(ii) to the Company's Current Report on Form 8-K filed on October 16, 2008)
3.3	Certificate of Amendment to Articles of Incorporation, filed January 19, 2012, effective February 6, 2012 (Incorporated herein by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed on January 20, 2012)
4.1	Specimen Stock Certificate (Incorporated herein by reference to Exhibit 4.1 of Amendment No. 2 to the Company's Registration Statement on Form S-1/A filed on February 4, 2009)
10.1#	English Translation of Employment Agreement between Shenyang Taiyu Machinery & Electronic Co., Ltd. and Jun Wang, dated January 1, 2008 (Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 18, 2008)
10.2#	English Translation of Employment Agreement between Shenyang Taiyu Machinery & Electronic Co., Ltd. and Zhijuan Guo, dated January 1, 2008 (Incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 18, 2008)
10.3	Certificate of Appointment by Sondex A/S of Shenyang Taiyu Machinery & Electronic Co., Ltd. as Authorized Dealer in China, dated March 2006 and letter naming Shenyang Taiyu Machinery & Electronic Co., Ltd. as Dealer of North China, dated May 5, 2006 (Incorporated herein by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on April 18, 2008)
10.4	Agreement of Conveyance, Transfer and Assignment of Assets and Assumption of Obligations between SmartHeat Inc. and PGR Holdings, Inc., dated April 14, 2008 (Incorporated herein by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K filed on April 18, 2008)
10.5	Stock Purchase Agreement between Jason Schlombs and SmartHeat Inc., dated April 14, 2008 (Incorporated herein by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K filed on April 18, 2008)
10.6	Form of Registration Rights Agreement (Incorporated herein by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K filed on July 11, 2008)
10.7	English Translation of Share Exchange Agreement dated September 25, 2008, between SmartHeat Inc. and Asialink (Far East) Limited (Incorporated by reference to Exhibit 10.13 of Amendment No. 1 to the Company's Registration Statement on Form S-1/A filed on December 12, 2008)



Table of Contents

10.8	English Translation of the Asset Acquisition Agreement, dated May 27, 2009, by and between Shenyang Taiyu Machinery & Electronic Co., Ltd. and Siping Beifang Heat Exchanger Manufacture Co., Ltd. (Incorporated herein by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K filed on May 29, 2009)
10.9	English Translation of the Amended and Restated Asset Purchase Agreement, dated June 16, 2009, by and between Shenyang Taiyu Machinery & Electronic Co., Ltd. and Siping Beifang Heat Exchanger Manufacture Co., Ltd. (Incorporated herein by reference to Exhibit 10.15 to the Company's Current Report on Form 8-K/A filed on June 16, 2009)
10.10#	Employment Agreement, dated February 1, 2010, between SmartHeat Inc. and Xudong Wang (Incorporated herein by reference to Exhibit 10.18 to the Company's Current Report on Form 8-K filed on February 3, 2010)
10.11	SmartHeat, Inc. 2010 Equity Incentive Plan (Incorporated herein by reference to the Company's Definitive Proxy Statement on Schedule 14A filed on April 16, 2010)
21.1†	<u>Subsidiaries of the Registrant</u>
23.1†	<u>Consent of Independent Registered Public Accounting Firm</u>
24.1†	Power of Attorney (Included on the Signature Page of this Annual Report on Form 10-K)
31.1†	<u>Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
31.2†	<u>Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
32.1‡	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as signed by the Chief Executive Officer</u>
32.2‡	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as signed by the Chief Financial Officer</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

# Indicates management contract or compensatory plan, contract or arrangement.

† Filed herewith.

‡ Furnished herewith.



Table of Contents