

SMARTHEAT INC.
Form 424B3
November 18, 2010

**Filed Pursuant to Rule 424(b)(3)
Registration No. 333-169967**

PROSPECTUS SUPPLEMENT
(To Prospectus dated November 2, 2010)

5,000,000 Shares

SMARTHEAT INC.

Common Stock

This is an offering of 5,000,000 shares of the common stock of SmartHeat Inc.

Our common stock trades on the NASDAQ Global Market under the symbol HEAT.

Investing in our common stock involves risks. See Risk Factors beginning on page S-10 of this prospectus supplement and in our Annual Report on Form 10-K for the year ended December 31, 2009, filed with the Securities and Exchange Commission.

	Per Share	Total
Price to the public	\$5.00	\$ 25,000,000
Underwriting discounts and commissions	\$0.25	\$ 1,250,000
Proceeds to SmartHeat Inc. (before expenses)	\$4.75	\$ 23,750,000

We have granted the underwriters the option to purchase 750,000 additional shares of common stock on the same terms and conditions set forth above if the underwriters sell more than 5,000,000 shares of common stock in this offering.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

Barclays Capital, on behalf of the underwriters, expects to deliver the shares on or about November 23, 2010.

Barclays Capital

Oppenheimer & Co.

Prospectus Supplement dated November 18, 2010

TABLE OF CONTENTS

TABLE OF CONTENTS

Prospectus Supplement

	Page
<u>About this Prospectus Supplement</u>	<u>S-1</u>
<u>Cautionary Statements Concerning Forward-Looking Statements</u>	<u>S-2</u>
<u>Prospectus Supplement Summary</u>	<u>S-3</u>
<u>The Offering</u>	<u>S-9</u>
<u>Risk Factors</u>	<u>S-10</u>
<u>Summary Consolidated Data</u>	<u>S-24</u>
<u>Use of Proceeds</u>	<u>S-25</u>
<u>Capitalization</u>	<u>S-25</u>
<u>Price Range of Common Stock and Dividend Policy</u>	<u>S-26</u>
<u>Underwriting</u>	<u>S-27</u>
<u>Validity of the Securities</u>	<u>S-33</u>
<u>Experts</u>	<u>S-33</u>
<u>Where You Can Find More Information</u>	<u>S-33</u>
<u>Incorporation of Certain Documents by Reference</u>	<u>S-33</u>

Prospectus

<u>About This Prospectus</u>	<u>1</u>
<u>Note on Forward-Looking Statements</u>	<u>2</u>
<u>Prospectus Summary</u>	<u>3</u>
<u>Risk Factors</u>	<u>9</u>
<u>Use of Proceeds</u>	<u>9</u>
<u>Plan of Distribution</u>	<u>9</u>
<u>Description of Securities We May Offer</u>	<u>12</u>
<u>Legal Matters</u>	<u>24</u>
<u>Experts</u>	<u>24</u>
<u>Where You Can Find More Information About Us</u>	<u>24</u>
<u>Incorporation of Certain Documents by Reference</u>	<u>24</u>
<u>Disclosure of Commission Position on Indemnification for Securities Act Liabilities</u>	<u>25</u>

You should rely only on the information or representations provided in or incorporated by reference into this prospectus supplement and the accompanying base prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement, the accompanying base prospectus or any supplement hereto or thereto is accurate as of any date other than the date on the front of those documents.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS SUPPLEMENT

Unless the context otherwise requires, references in this prospectus supplement and the accompanying base prospectus to we, us, SmartHeat or the Company refer to SmartHeat Inc. and its subsidiaries.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering and also adds to and updates information contained in the accompanying base prospectus. The second part is the accompanying base prospectus, which provides more general information. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying base prospectus, on the other hand, you should rely on the information in this prospectus supplement. It is also important for you to read and consider all information contained in this prospectus supplement and the accompanying base prospectus, including the documents we have referred you to in the section entitled Where You Can Find More Information in this prospectus supplement. The information incorporated by reference is considered part of this prospectus supplement.

S-1

TABLE OF CONTENTS

CAUTIONARY STATEMENTS CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains forward-looking statements regarding SmartHeat 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 a view to and variati 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 and heat meters 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 effectively protect our intellectual property rights 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 prospectus supplement contains statistical data that we obtained from various publicly available government publications. Statistical data in these publications also include projections based on a number of assumptions. The market for the PHEs, PHE Units and heat meters may not grow at the rate projected by market data, or at all. The failure of this market to grow at the projected rate may have a material adverse effect on our business and the market price of our common stock. In addition, the rapidly changing nature of our customers' industries results in significant 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. You should not place undue reliance on these forward-looking statements.

You are cautioned that, while forward-looking statements reflect our good faith beliefs, they are not guarantees of future performance and they involve known and unknown risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of various factors. The information contained or incorporated by reference in this prospectus supplement, including, without limitation, the information set forth in Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2009, which we refer to as the 2009 10-K, that are

incorporated by reference in this prospectus supplement, identifies important factors that could cause such differences.

We undertake no obligation to release publicly the results of any revisions to these forward-looking statements that may reflect any future events or circumstances, except as required by applicable law, rules or regulations.

S-2

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information from this prospectus supplement. The following summary information is qualified in its entirety by the information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying base prospectus. This summary does not contain all of the information that you should consider prior to making your investment decision. You should read the following summary in conjunction with the more detailed information contained elsewhere in this prospectus supplement and the accompanying base prospectus, and the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying base prospectus before making an investment decision. Unless the context otherwise requires, references to we, us, our, SmartHeat or the Company refer to SmartHeat Inc. and its subsidiaries.

Our Company

We are a leading designer, manufacturer and seller of clean technology heat exchangers and related systems in the People's Republic of China (China). Our products are used by our customers in the industrial, residential and commercial markets in China to improve energy utilization and efficiencies and reduce pollution by reducing the need for coal fired boilers. We design, manufacture, sell and service plate heat exchangers (PHEs), PHE units, which combine PHEs with various pumps, temperature sensors, valves and automated control systems (PHE Units), and heat meters 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 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 (HVAC) and industrial use in petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. Our PHE Units are custom designed by our own in-house engineers and sold under our Taiyu brand name, while our PHEs are sold under both our Taiyu brand as well as the Sondex brand name.

A PHE is a device that transfers energy from one fluid to another across a solid surface. PHEs are made of stainless steel, titanium or nickel alloy plates that are sealed by gaskets and then bolted together in a large metal frame that holds the plates together. Plates come in a variety of sizes and wave patterns, and have large heat transfer surfaces and high thermal conductivity. The quantity and size of the plates and size of the PHEs and PHE Units vary according to particular application requirements.

Among the primary advantages of plate heat exchangers as compared to traditional shell and tube heat exchangers are their efficiency, compact design and ease of customization. PHEs have larger heat transfer surface areas and therefore greater thermal conductivity. As a result, PHEs can transfer the same amount of heat as a traditional shell and tube heat exchanger despite the smaller size of the PHE. In China, coal is the predominant source of heat energy, and coal burning is a significant contributor to carbon dioxide (CO₂) emissions. According to International Energy Statistics provided by the Energy Information Administration, a subdivision of the United States Department of Energy, in 2007, the consumption of coal accounted for 27% of the total primary energy consumption in the world. China was the largest producer of CO₂ from the consumption of coal in 2008, accounting for 41.7% of the world total.

The PRC government's 11th Five-Year Plan (the 11th Five-Year Plan), announced in 2006, targeted a 20% reduction in energy consumption per unit of GDP and a 10% reduction in industry expulsion of pollutant particles by 2010. Management expects further reductions will be included in the upcoming 12th Five-Year Plan. As the Chinese

government begins to require the use of machines that produce more efficient heat transfer and utilize waste heat energy, PHEs will be an increasingly important element in reducing overall coal consumption in China, which will translate into lower heating costs, lower CO₂ emissions for users and less pollution to the environment. According to the Chinese government, China has cut energy use per unit of GDP by 14.4% between 2006 and 2009 and it aims to cut carbon dioxide output per unit of GDP by at least 40% by 2020 compared with 2005 levels.

S-3

TABLE OF CONTENTS

We currently focus predominantly on the Chinese market. 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. In May of 2009, we acquired the production assets of Siping Beifang Heat Exchanger, Manufacture Co., Ltd. (Siping Beifang), one of the major plate heat exchanger manufacturers in China, and began a program to vertically integrate our supply chain for our own PHE components and, at the same time, supplement our relationship with our main supplier, Sondex. As a result, we now manufacture our own plates, tubes, and gaskets and can design and manufacture PHEs and PHE Units using either supply source for the component plates. Our new plates provide solutions for a market segment with strong demand for PHE products that are priced 10-15% lower than PHE products with Sondex plates.

In early 2006 we launched a third product line, heat meters, which utilize the same sales channels and allows us to provide heat consumption information to users. Heat meters precisely measure the volume of heat usage, which is an important revenue stream for utility companies. While home owners commonly use heat meters in western countries, widespread incorporation of heat meters has only recently taken hold in China. In July 2003, heat meters were required nationally by law for new construction installed with central heating; the requirement was extended in April 2008 by the Energy Conservation Law, Article 38, to cover existing buildings being retrofitted. We believe there are significant opportunities for strong incremental growth as the Chinese government continues to focus on ways to cost effectively monitor and conserve energy.

PHE

PHE Unit

Heat Meter

For the nine months ended September 30, 2010, we generated revenues of \$83.6 million and net income of \$16.2 million, representing year-over-year growth rates of 47.9% and 29.4%, respectively. We experienced similar growth rates from 2006 to 2009, during which period our total revenue increased from \$8.2 million to \$82.6 million (a compound annual growth rate (CAGR) of 116.0%), and our net income grew at a 168.0% CAGR from \$0.8 million in 2006 to \$15.4 million in 2009.

Our company is headquartered in Shenyang, China, where we have a 210,137 square foot state-of-the-art production facility. We operate two other production and assembly facilities in China. As of September 30, 2010, we had 712 full-time employees, including 76 engineers dedicated to research and development, and 130 seasonal employees.

Our principal offices are located at A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110027. Our telephone number is 86 (24) 2519-7699.

TABLE OF CONTENTS

Our Industry

We serve the utility and industrial sectors throughout China. Participants in these industries are large users of PHEs, PHE Units and related accessories. We also serve the HVAC sector. Participants in this industry are large users of heat meters. We also provide after-sales services on our PHEs, PHE Units and heat meters to these industries. These services include maintenance, repair, and supplying spare parts.

According to the *China Heat Exchanger Industry Report* (hereinafter referred to as the *Industry Report*) issued by Zero Power Intelligence Co., Ltd., an independent market research firm in China, the world heat exchanger market has grown significantly in the past several years. Global sales of heat exchangers grew from \$29.7 billion in 2005 to \$38.6 billion in 2008, or 30%, and are expected to grow to \$55.3 billion in 2012, or 43% in the four-year period from 2009 to 2012.

According to the *Industry Report*, China has become the second largest market and one of the fastest growing markets for heat exchangers. The sales of heat exchangers in China grew from \$3.2 billion in 2005 to \$5.4 billion in 2008, or 70%, and are projected to grow to \$11.0 billion in 2012, or 106% in the four-year period from 2009 to 2012.

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, especially in large Chinese 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 currently provides households throughout 17 of its 34 northern provinces with heating water. As new cities grow 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 which pump emitted hot water from the power plant through a closed loop system to a water heating company and then through a network of pipes up to a distance of 50 kilometers. These systems of heating stations and sub-stations utilize numerous PHEs and PHE Units, which provide a dual purpose: a cooling system for the power plants and a heat source for residents and factories.

Heightened Environmental Awareness. Management expects the PRC government's upcoming 12th Five-Year Plan to target a 40-45% reduction in energy consumption per unit of GDP from 2005 levels. 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 their increased energy efficiency.

Urbanization. According to the CIA World Factbook, 43% of China's population lived in urban settings in 2008. Additionally, according to the National Bureau of Statistics of China, 15 cities near and around SmartHeat's sales and service centers have a population of more than five million. Eight of these Chinese cities are among the world's fastest growing, increasing at an annual rate of 2.5% or more. 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 is now demanding 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.

S-5

TABLE OF CONTENTS

Our Competitive Strengths

We believe we have the following competitive strengths:

Provider of Key Elements Used to Improve Energy Efficiencies and Reduce Coal Pollution. We offer a full line of PHEs, PHE Units and heat meters. 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 Leader and Brand Name in the Growing China Heating Industry. We have established a leading brand name in the fragmented Chinese heating industry and seek to utilize this awareness to become the leading Chinese supplier of PHEs, PHE Units and related products in the rapidly growing Chinese market. We are a leading domestic producer of PHE Units under the Taiyu brand and management estimates that we have approximately a 10-12% share of the PHE Unit market based on our internal market research, which tracks PHE projects in China valued over \$1.5 million. We believe the Taiyu brand name is recognized for its quality and efficiency, which we believe we can leverage to improve our reputation as a leading seller of 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 nine registered patents in China for PHE products and heat meters. We have two patents for our plate heat exchangers, one for our heat transfer system for space heating and domestic hot water, one for a heat meter cleaning pipe, two for our heat meter testing system, one for an integrated heat transfer system, one for an efficient-heat testing bench, and one for a filter. Five of our patents expire in 2014, one expires in 2016, one expires in 2010, and two expire in 2017. To maintain our competitive edge in the marketplace and keep pace with new technologies, we fund research and development on an on-going basis to find improved efficiencies in design, cost and energy capture. Research and development costs for 2008, 2009 and the nine months ended September 30, 2010, were \$1,020,000, \$1,360,000 and \$1,698,000, respectively. We plan to continue to invest in research and development to identify new industry applications for PHEs, improve 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 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 design systems are integrated with our real-time enterprise resource planning (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 National Safety Certification for our PHE products, and are an ISO 9001 certified manufacturer.

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 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.

S-6

TABLE OF CONTENTS

Diversified End Markets and Customers. Our PHEs and PHE Units are broadly used across a variety of industrial end markets including the energy (i.e., conventional and nuclear power plants), HVAC, petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing end markets. We also benefit from a diverse customer mix. For the nine months ended September 30, 2010, our ten largest customers accounted for 31% of sales and our largest customer accounted for 7% of sales. For the fiscal year ended December 31, 2009, our ten largest customers accounted for 47% of sales and our largest customer accounted for 7% of sales. This end market and customer diversification helps to insulate us from sales volatility that would occur if we concentrated in specific industries. The bulk of our customers are utilities, engineering and construction companies and industrial companies.

Proven Ability to Identify and Acquire Strategic Targets. Over the past two years, we have completed two strategic acquisitions. Each acquisition has accelerated our strategic plan by: (i) adding manufacturing capacity; (ii) broadening our product offering 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; or (vi) helping us enter new and higher growth end markets. We have proven our ability to complete successful acquisitions and believe there are additional acquisition opportunities both in the Chinese domestic market and internationally which we may potentially pursue.

Experienced Management Team. Our senior management team has extensive business and industry experience. Mr. Jun Wang, our president and CEO, was the founder of Taiyu in 2002. He was a sales manager for Honeywell International Inc. from 1996 to 1999 and was a sales manager for Alfa Laval from 1994 to 1996. Mr. Wang obtained his Master's degree in Engineering from Tsinghua University in 1989. Ms. Zhijuan Guo, our CFO, has 14 years of finance and accounting experience and has been with the Company since its inception in 2002. Mr. Xudong Wang, our VP of strategy and development, previously served as the VP of an international financial firm. Mr. Wen Sha, our VP of marketing, has extensive sales experience and industry contacts. He joined SmartHeat as a Regional Sales Manager in 2005. Prior to that, 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. Mr. Feng Chen, Ph.D., our CTO, joined SmartHeat in 2008 as part of our SanDeKe acquisition. Prior to founding SanDeKe, he served in a leading engineering position in China with Alfa Laval.

Our Growth Strategy

Our goal is to further penetrate the many market segments throughout China for PHEs, PHE Units and related accessories, expand our PHE and PHE Unit sales both domestically and internationally, promote the sale of heat meters and execute strategic acquisitions that are accretive and synergistic to our business.

Pursue High Growth Chinese End Markets. We are targeting our sales efforts on a number of high growth Chinese end markets such as power and petrochemical. 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.

Continue Organic Growth Initiatives. We believe that the current PHE market is fragmented and represents an excellent opportunity for us to gain additional market share from our competitors. We intend to continue to open new sales offices, hire additional sales personnel, expand into new distribution channels and improve the quality of our products. We also intend to continue to leverage our strong brand, quality customer service, engineering 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 product lines.

Promote Heat Meters. In response to rising energy costs and an increased focus on energy efficiency, the Chinese government and local utility companies have 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; the requirement was extended in April 2008 by the Energy Conservation Law, Article 38, to cover existing buildings being retrofitted. We are currently working with the General Administration of Quality Supervision and Quarantine, an administrative organ established under the PRC's State Council, to establish a national heating standard in China. We also intend to leverage the Taiyu brand and our reputation in the PHE market to gain market share.

S-7

TABLE OF CONTENTS

Expand Internationally. We continue to seek additional opportunities to expand our business internationally. We plan to cooperate with a number of international energy contractors to help promote our products outside of China and will review international acquisition opportunities and joint venture opportunities for international growth.

Execute Strategic Acquisitions. We intend to continue to selectively acquire domestic or international targets that would enable us to enter new customer segments or gain entry into new industries. For example, the acquisition of the plant and machinery and land use rights from Siping Beifang in May 2009 provided us with an entrance into the petrochemical and high pressure chemical end markets, which were previously immaterial segments for us. We also acquired SanDeKe in September 2008, which increased our PHE and PHE Unit production capacity. Due to the high pressure and heat tolerance demands of the petrochemical industry, we have also acquired valuable engineering expertise that may help us address the nuclear energy segment in a meaningful way. Management believes it has a strong track record of acquiring companies that fit our strategic goals of reducing pollution and saving energy, and of successfully integrating their operations so they are accretive to earnings and contribute to our rapid growth. We will continue to identify and review targets that are accretive to our earnings, easily integrated into our existing infrastructure and synergistic to our operations.

Risk Factors

Please see **Risk Factors** starting on page S-10 to read about factors you should consider carefully before deciding to invest in shares of our common stock.

S-8

TABLE OF CONTENTS

THE OFFERING

The following is a brief summary of certain terms of this offering. For a more complete description of our common stock, see "Description of the Securities We May Offer" in the accompanying base prospectus.

Issuer

SmartHeat Inc.

Common stock offered by us

5,000,000 shares

Underwriters' option to purchase additional shares

We may sell up to an additional 750,000 shares of common stock if the underwriters exercise their option to purchase additional shares.

Common stock outstanding immediately after this offering

37,811,125 shares

Use of Proceeds

We intend to use the net proceeds of this offering for general corporate purposes and potential acquisitions (although no specific acquisition candidate has been identified to date).

NASDAQ Global Market Listing

Our common stock trades on the NASDAQ Global Market under the symbol HEAT.

Transfer Agent

Interwest Transfer Company, Inc.

Risk Factors

See Risk Factors beginning on page S-10 of this prospectus supplement and in the 2009 10-K filed with the SEC for a discussion of factors that you should consider carefully before deciding to invest in our common stock.

The number of common stock outstanding immediately after the offering is based on 32,811,125 shares outstanding as of November 17, 2010, which excludes 96,775 shares of our common stock issuable upon exercise of warrants outstanding as of September 30, 2010, at an exercise price of \$6.00 per share; stock options outstanding as of September 30, 2010, to purchase 63,333 shares of our common stock at an exercise price of \$10.32 per share; 500 shares of our common stock to be issued pursuant to a one-year consulting service agreement with a consultant; and 1,000,000 shares of our common stock reserved for issuance under our 2010 Equity Incentive Plan. Except as otherwise stated, the information in this prospectus supplement does not take into account the exercise of the underwriters' option to purchase additional shares of common stock in the event the underwriter sells more than 5,000,000 shares.

TABLE OF CONTENTS

RISK FACTORS

Our business and an investment in our common stock are subject to a variety of risks. Before purchasing our common stock, you should carefully consider the Risk Factors discussed below in this prospectus supplement and in our 2009 10-K. Those Risk Factors update and replace the Risk Factors identified in the accompanying base prospectus under the caption Risk Factors. Each of the risks described could result in a decrease in the value of our common stock and your investment therein. Much of the business information as well as the financial and operational data contained in our risk factors are updated in our periodic reports, certain of which are also incorporated by reference into this prospectus supplement. Although we have tried to discuss key factors, please be aware that other risks may prove to be important in the future. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our financial performance.

Risks Related to this Offering and Ownership of Our Securities

The market price for our common stock may be volatile.

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, in addition to the risk factors incorporated by reference herein, 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 the market for companies based in China in particular, 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.

Our quarterly results may be volatile.

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.

Future sales of shares of our common stock could adversely affect the prevailing market price of our stock. If our significant shareholders sell a large number of shares, or if we issue a large number of shares, the market price of our stock could significantly decline. Moreover, the perception in the public market that shareholders might sell shares of

our stock could depress the market for our shares.

Purchasers in this offering will experience immediate and substantial dilution in net tangible book value.

The assumed public offering price will be substantially higher than the net tangible book value per share of our outstanding shares of common stock. As a result, investors purchasing shares of our common stock in this offering will incur immediate dilution of \$1.25 per share, based on the public offering price of \$5.00 per share and our tangible net book value per share as of September 30, 2010. Investors purchasing shares of our common stock in this offering will pay a price per share that substantially exceeds the book value of our assets after subtracting our liabilities.

S-10

TABLE OF CONTENTS

Our management has broad discretion as to the use of the net proceeds from this offering and may allocate the net proceeds of this offering in ways that you or other shareholders may not approve.

We have not determined the specific amounts we plan to spend on any of the uses described in Use of Proceeds or the timing of these expenditures. Failure by our management to apply these funds effectively could adversely affect our ability to maintain and expand our business. In the event management does not apply these funds effectively, your investment in our common stock may not result in a favorable return.

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 the Company.

As of September 30, 2010, Mr. Jun Wang, our Chief Executive Officer and one of our largest shareholders, beneficially owned 10.37% of our outstanding shares. Following completion of this offering, Mr. Wang will beneficially own approximately 9.00% of our outstanding shares (8.83% if the underwriters over-allotment option is exercised in full). Mr. Wang possesses significant influence over us, giving him the ability, among other things, to effectively control 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 our major shareholder's interests. The interests of this shareholder may differ from the interests of our other shareholders.

Provisions in our articles of incorporation could make it very difficult for you to bring any legal actions against our directors for violations of their fiduciary duties or could require us to pay any amounts incurred by our directors in any such actions.

Pursuant to our articles of incorporation, members of our board of directors will have no liability for violations of their fiduciary duty of care as a director, except in limited circumstances. This means that you may be unable to prevail in a legal action against our directors even if you believe they have breached their fiduciary duty of care. In addition, our certificate of incorporation allows us to indemnify our directors from and against any and all expenses or liabilities arising from or in connection with their serving 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.

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. We presently do not intend to pay dividends in the foreseeable future. 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. In addition, PRC law limits our ability to pay dividends. (See Risks Relating to Doing Business in China Limitations on the ability of our operating subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business and fund our operations.)

Risks Related to Our Business

Our relationship with Sondex has substantially contributed to our business and its growth.

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 currently sell PHEs under our Taiyu brand or upon demand under the Sondex brand, while our PHE Units are sold under our Taiyu brand only. 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 on May 27, 2009, we sourced all of our PHE plates, important raw elements used in both PHEs and PHE Units, from Sondex. However, our acquisition of the plant, machinery and land use rights of Siping Beifang, along with our internal R&D efforts, now enable us to produce our own plates for our heat

S-11

TABLE OF CONTENTS

exchangers, which we believe will significantly reduce our reliance on Sondex-supplied plates. We cannot assure you our products will be as well received in the marketplace 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 either manufacture plates ourselves and/or 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 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.

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 large part upon the level of capital and maintenance expenditures of our customers and the end users. These expenditures have historically 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 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. To date, the Company has not been adversely affected by these trends and, given the current demand visibility, we do not currently foresee weakening in the demand for our products in the next year. However, the historically cyclical nature of the demand for our products limits our ability to make accurate long-term predictions about our performance. Changing world economic and political conditions may also reduce the willingness of our customers and prospective customers to purchase our products and services. The seasonality of our business results in significant operational challenges to our production and inventory control functions.

We historically have derived a substantial part of our revenues from several major customers. If we lose any of these customers or they reduce the amount of business they do with us, our revenues may be seriously affected.

For the nine months ended September 30, 2010, our ten largest customers accounted for 31% of our revenues and our largest customer accounted for 7% of our revenues. For the year ended December 31, 2009, our ten largest customers accounted for 47% of our revenues and our largest customer accounted for 7% of our revenues. These customers may not maintain the same volume of business with us in the future. If we lose any of these customers or they reduce the amount of business they do with us, our revenues and profitability may be seriously affected.

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 may experience payment delays from time to time, which range from 1 month to 3 months from the due date. While these payment delays are very common in the heating manufacturing industry in China and historically our collections have been reasonably assured, such delays cause capital to be tied up in inventories, which

may result in pressure on our cash flows and liquidity. For the nine months ended September 30, 2010, we had accounts receivable turnover of 2.58 on an estimated annualized basis, with days sales outstanding of 141 and inventory turnover of 3.30 on an estimated annualized basis. For the year ended December 31, 2009, we had accounts receivable turnover of 3.6 with days sales outstanding of 146 and inventory turnover of 6.2 on an annualized basis. The low accounts receivable turnover and high days outstanding is due to the seasonality of the Company's sales and postponement of payments from certain customers for projects collected in the fourth quarter. The low inventory turnover for the nine months ended September 30, 2010, compared to the year ended December 31,

S-12

TABLE OF CONTENTS

2009, was due to increased inventory on hand for the readiness of the high production season with an increased number of large orders in 2010. Approximately 70% of the Company's revenue is generated in the third and fourth quarters.

We acquire most of the components for the manufacture of our products from a limited number of suppliers.

We acquire most of the components for the manufacture of our products from a limited number of suppliers. For us to have our products manufactured, 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 promptly and cost-effectively manufacture our products to meet customer orders, which could harm our credibility and the market acceptance and sales of our products. Increased costs associated with supplied materials or components could increase our costs and reduce our profitability if we are unable to pass these cost increases on to our customers.

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 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. 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.

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/or negatively impact our financial results. Any of our manufacturing facilities, or any of our machines within an otherwise operational facility, could cease operations

We acquire most of the components for the manufacture of our products from a limited number of suppliers.

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.

S-13

TABLE OF CONTENTS

We cannot be certain that our product innovations and marketing successes will continue.

We believe 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.

Our technology may not satisfy the changing needs of our customers.

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.

We may not be able to keep pace with rapid technological changes and competition in our industry.

While we believe we have hired or engaged personnel and outside consultants who have the experience and ability necessary to keep pace with advances in technology, and 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 to best penetrate the 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 the following:

- 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.

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.

Our products may contain defects, which could adversely affect our reputation and cause us to incur significant costs.

Despite testing, defects may be found in existing or new products. Any such defects could cause us to incur significant return and exchange costs, re-engineering costs, divert the attention of our engineering personnel from product development efforts, and cause significant customer relations and business reputation problems. Any such defects could force us to undertake a product recall program, which could cause us to incur significant expenses and could harm our reputation and that of our products. If we deliver products with defects, our credibility and the market acceptance and sales of our products could be harmed.

S-14

TABLE OF CONTENTS

Due to the nature of our business and products, we may be liable for damages based on product liability and warranty claims.

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. We have been subject to 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.

We may experience delays in launching our products, which would negatively impact our position in the marketplace.

We may experience delays in bringing new products to market, due to design, manufacturing or distribution problems. Such delays could adversely affect our ability to compete effectively and may adversely affect our relationship with our customers. Any such delays would adversely affect our revenues and our ability to become profitable.

If we are not able to manage our growth, we may not remain profitable.

Our success will depend on our ability to expand and manage our operations and facilities. There can be no assurance we will be able to manage our growth, meet the staffing requirements for our business or for additional collaborative relationships or successfully assimilate and train new employees. In addition, to manage our growth effectively, we may be required to expand our management base and enhance our operating and financial systems. If we continue to grow, there can be no assurance that the management skills and systems currently in place will be adequate or that we will be able to manage any additional growth effectively. Failure to achieve any of these goals could have a material adverse effect on our business, financial condition or results of operations.

Our business could be subject to environmental liabilities.

As is the case with manufacturers of similar products, we use certain hazardous substances in our operations. Currently, we do not anticipate any material adverse effect on our business, revenues or results of operations, as a result of compliance with Chinese environmental laws and regulations. However, the risk of environmental liability and charges associated with maintaining compliance with 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.

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 president and chief executive officer. Loss of their services could adversely impact our ability to achieve our business objectives. We believe our future success will depend upon our ability to retain these 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 definite period of time or that we will be able to attract, train or retain qualified personnel in the future and the 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. We need to employ additional personnel to expand our

TABLE OF CONTENTS

business. There is no assurance that 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.

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

We are required to establish and maintain internal controls over financial reporting, disclosure controls, and to comply with other requirements of the Sarbanes-Oxley Act and the rules promulgated by the SEC thereunder. Our management, including our Chief Executive Officer and Chief Financial Officer, cannot guarantee our internal controls and disclosure controls will prevent all possible errors or all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. In addition, the design of a control system must reflect the fact that there are resource constraints and the benefit of controls must be relative to their costs. 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 Corporation have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Further, 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 also 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.

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.

Capital requirements are difficult to plan for in our rapidly changing industry. Although we currently expect to have sufficient funding for the next 12 months, we expect we will need additional capital to fund our future growth.

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 United States, China, and other countries; and
- Governmental policies relating to foreign currency borrowings.

We may be required to pursue sources of additional capital through various means, including joint venture projects and debt or equity financings. 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 be successful in obtaining the capital we require

If we fail to establish and maintain an effective system of internal control, we may not be able to report our financial

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, superior voting rights, the issuance of warrants or other derivative securities, and the issuances of incentive awards under equity employee incentive plans, which may have additional dilutive effects. Further, we may incur substantial costs in pursuing future capital and/or financing, including investment banking fees,

TABLE OF CONTENTS

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.

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 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 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 materially adversely affect our business. Regardless of whether any such claims are valid or can be successfully asserted, 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.

Risks Related to Doing Business in China

Limitations on the ability of our operating subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business and fund our operations.

We are a holding company and conduct substantially all of our business through our operating subsidiaries in China. We will of necessity 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. The payment of dividends by entities organized in China is subject to limitations. In particular, regulations in China currently permit payment of dividends only out of accumulated profits as determined in accordance with Chinese accounting standards and regulations. We are also required to set aside at least 10% of our operating subsidiaries' after-tax profit based on Chinese accounting standards each year to a statutory surplus reserve fund until the accumulative amount of such reserve reaches 50% of the Company's registered capital. These reserves are not distributable as cash dividends. In addition, we are required to allocate a portion of after-tax profit to a staff welfare and bonus fund at the discretion of the Company. 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.

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

We may be subject to claims that we have infringed the proprietary rights of others, which could require us to obtain

Our executive officers and several of our directors, including the chairman of our Board of Directors, are Chinese citizens. It may be difficult, if not impossible, to acquire jurisdiction over these persons in the event a lawsuit is initiated against us and/or our officers and directors by a shareholder or group of shareholders in the United States. Also, because our operating subsidiaries and assets are located in China, it may be extremely difficult or impossible for you 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.

S-17

TABLE OF CONTENTS

Substantially all of our assets are located in China and all of our revenue is derived from our operations in China. Accordingly, our results of operations and prospects are subject, to a significant extent, to the economic, political and legal developments in China.

While China's economy has experienced significant growth in the past twenty years, such growth has been uneven, both geographically and among various sectors of the economy. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall economy of China, but they may also have a negative effect on us. For example, our operating results and financial condition may be adversely affected by the government control over capital investments or changes in tax regulations. The economy of China has been changing from a planned economy to a more market-oriented economy. In recent years China 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 government. In addition, the government continues to play a significant role in regulating industry development by imposing industrial policies. It also exercises significant control over China's economic growth through the allocation of resources, the control of payment of foreign currency-denominated obligations, the setting of monetary policy and the provision of preferential treatment to particular industries or companies.

PRC regulations relating to mergers, offshore companies and Chinese 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.

Depending on the structure of the transaction, these regulations require Chinese 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 Chinese 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.

We must comply with the Foreign Corrupt Practices Act.

We are required to comply with the United States Foreign Corrupt Practices Act, which prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. Foreign companies, including some of our competitors, are not subject to these prohibitions. 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. 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

Substantially all of our assets are located in China and all of our revenue is derived from our operations in China. A

could suffer severe penalties.

If the China Securities Regulatory Commission, or CSRC, or another PRC regulatory agency determines that its approval is required in connection with this offering, this offering may be delayed or cancelled, or 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 Rule, which became effective on September 8, 2006. The M&A Rule, among other things, has 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

S-18

TABLE OF CONTENTS

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 this offering or other of our 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. The CSRC or other PRC regulatory agencies may also take actions requiring us, or making it advisable for us, to delay or cancel this offering before settlement and delivery of the ordinary shares being offered by us.

We operate in the PRC through our Wholly Foreign-Owned Enterprise (WFOE) status initially approved by the local office of the PRC Ministry of Commerce (MOFCOM). However, we cannot warrant that such approval procedures have been completely satisfied due to a number of reasons, including changes in laws and government interpretations. If we lose our WFOE status for any reason, our business in China may be negatively impacted.

Our operating entities in the PRC have received initial MOFCOM approval as WFOEs and there may be conditions subsequent to complete and maintain such status. We believe we have satisfied MOFCOM's approval procedures for having obtained such status. However, MOFCOM's approval procedures or interpretations of its approval procedures may be different from our understanding or may change. As a result, if we lose our WFOE status 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.

If we fail to satisfy an enlarged contribution of capital requirement at our PRC subsidiaries, our business in China will be adversely affected.

As of September 30, 2010, we have contributed a total of \$61.1 million to our PRC subsidiaries. We are committed to contribute an additional \$40 million of capital by April 2015 to one of our PRC subsidiaries, SmartHeat (China) Investment Co., Ltd, an investment holding company in Shenyang. Under PRC laws, shareholders of a foreign-invested enterprise are required to contribute capital to satisfy the registered capital requirement of the foreign-invested enterprise within a period of not more than two years from the date when the foreign-invested enterprise's license to conduct business is initially granted. The relevant PRC government agencies may grant an additional three-month grace period. If the shareholders are unable to complete the capital contribution within the grace period, the PRC government may revoke the business license of the foreign-invested enterprise. Further, until such contribution of capital is satisfied, the foreign-invested enterprise is not allowed to repatriate profits to its shareholders, unless otherwise approved by the State Administration for Foreign Exchange (SAFE).

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

If the China Securities Regulatory Commission, or CSRC, or another PRC regulatory agency determines that its app

Our business is conducted in China. Doing business outside the U.S., particularly in China, subjects us to various risks, including changing economic and political conditions, major work stoppages, exchange controls, currency fluctuations, armed conflicts and unexpected changes in U.S. and foreign laws relating to tariffs, trade restrictions, transportation regulations, foreign investments and taxation. We have no control over most of these risks and may be unable to anticipate changes in international economic and political conditions and, therefore, unable to alter our business practice in time to avoid the possibility of reduced revenues.

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

China historically has not adopted a Western style of management and financial reporting concepts and practices, or modern banking, computer or 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

TABLE OF CONTENTS

experience difficulty in establishing management, legal and financial controls, collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet Western standards.

Our bank accounts are not insured or protected against loss.

We maintain our cash with various banks and trust companies located in China. Our cash accounts are not insured or otherwise protected. Should any bank or trust company 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 or trust company.

As we have limited business insurance coverage in China, any loss which we suffer may not be insured or may be insured to only a limited extent.

The insurance industry in China is still in an early stage of development and insurance companies located in China offer limited business insurance products. In the event of damage or loss to our properties, our insurance may not provide as much coverage as if we were insured by insurance companies in the United States.

Tax laws and regulations in China are subject to substantial revision, some of which may adversely affect our profitability.

The Chinese tax system is in a state of flux, and it is anticipated that China's tax regime will change in the coming years. Tax benefits we presently enjoy may not be available in the wake of these changes, and we could incur tax obligations to our government that are significantly higher than anticipated. These increased tax obligations could negatively impact our financial condition and our revenues, gross margins, profitability and results of operations may be adversely affected as a result.

Certain tax exemptions that we presently enjoy in China are scheduled to expire over the next several years.

As a substantial portion of our operations are located in a privileged economic zone, we are entitled to certain tax benefits. When these exemptions expire, our income tax expenses will increase, reducing our net income below what it would be if we continued to enjoy these exemptions.

We may face judicial corruption in China.

The political, governmental and judicial systems in China are sometimes impacted by corruption. There is no assurance we will be able to obtain recourse in any legal disputes with suppliers, customers or other parties with whom we conduct business, if desired, through China's poorly developed and sometimes corrupt judicial systems.

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

At various times during recent years, the 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.

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

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

S-20

TABLE OF CONTENTS

Uncertainties with respect to the Chinese legal system could limit legal protections available to us.

Our operating subsidiaries, which conduct most of their operations in China, are generally subject to laws and regulations applicable to foreign investment in China. The Chinese legal system is based on written statutes, and prior court decisions may be cited for reference but have no precedential value. Since 1979, legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, since these laws and regulations are relatively new and the legal system in China continues to evolve rapidly, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit legal protections available to us. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

Chinese regulations relating to the establishment of offshore special purpose companies by Chinese residents and registration requirements for employee stock ownership plans or share option plans may subject our China resident shareholders to personal liability and limit our ability to acquire Chinese companies 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 us.

The SAFE issued a public notice in October 2005, 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 that 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. To clarify the implementation of Circular 75 further, the SAFE issued Circular 124 and Circular 106 on November 24, 2005 and May 29, 2007, respectively. Under Circular 106, PRC subsidiaries of an offshore special purpose company are required to coordinate and supervise the filing of SAFE registrations by the offshore holding company's shareholders who are PRC residents in a timely manner. If these shareholders fail to comply, the PRC subsidiaries are required to report to the local SAFE authorities. If the PRC subsidiaries of the offshore parent company do not report 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 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 above SAFE registration requirements could result in liabilities under PRC laws for evasion of foreign exchange restrictions. Some of our PRC resident beneficial owners have not registered with the local SAFE branch as required under SAFE regulations. The failure or inability of these 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 released detailed registration procedures for employee stock ownership plans or share option plans to be established by overseas listed companies and for individual plan participants. Any failure to comply with the relevant registration procedures may affect the effectiveness of our employee stock ownership plans or share option plans and subject the plan participants, the companies offering the plans or the relevant intermediaries, as the

case may be, to penalties under PRC foreign exchange regime. These penalties may subject us to fines and legal sanctions, prevent us from being able to make distributions or pay dividends, as a result of which our business operations and our ability to distribute profits to you could be materially and adversely affected.

In addition, the NDRC promulgated a rule in October 2004 (the NDRC Rule), which requires NDRC approvals for overseas investment projects made by PRC entities. The NDRC Rule also provides that approval procedures for overseas investment projects of PRC individuals must be implemented with reference to this rule. However, there exist extensive uncertainties in terms of interpretation of the NDRC Rule with respect to its application to a PRC individual's overseas investment, and in practice, we are not aware of any precedents that a PRC individual's overseas investment has been approved by the NDRC or challenged by the NDRC based on the absence of NDRC approval. Our current beneficial owners who are PRC individuals did not apply for NDRC approval for investment in us. We cannot predict how and to what extent this will affect our

TABLE OF CONTENTS

business operations or future strategy. For example, the failure of our shareholders who are PRC individuals to comply with the NDRC Rule may subject these persons or our PRC subsidiaries to certain liabilities under PRC laws, which could adversely affect our business.

Regulation of loans and direct investment by offshore holding companies to Chinese entities may delay or prevent us from making loans or additional capital contributions to our operating subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

As an offshore holding company of our Chinese operating subsidiaries, we may need to make loans to them, or we may need to make additional capital contributions to them. Any loans to our operating subsidiaries are subject to Chinese regulations. 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.

We may also decide to finance our subsidiaries by means of capital contributions. These capital contributions must be approved by MOFCOM or its local counterpart. 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 capital contributions by us to our subsidiaries.

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

The Renminbi 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 Chinese subsidiaries may purchase foreign currencies for settlement of current account transactions, including payments of dividends to us, without the approval of SAFE. However, the relevant Chinese 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 Renminbi, any existing and future restrictions on currency exchange may limit our ability to utilize revenues generated in Renminbi to fund our business activities outside China that are denominated in foreign currencies.

Foreign exchange transactions by our Chinese subsidiaries under the capital account continue to be subject to significant foreign exchange controls and require the approval of or need to register with Chinese governmental authorities, including SAFE. In particular, if our Chinese subsidiaries borrow foreign currency loans from us or other foreign lenders, these loans must be registered with SAFE, and if we finance our Chinese subsidiaries by means of additional capital contributions, these capital contributions must be approved by certain government authorities, including the NDRC, MOFCOM, or their respective local counterparts. These limitations could affect the ability of our Chinese subsidiaries to obtain foreign exchange through debt or equity financing.

We face risks associated with currency exchange rate fluctuations; any adverse fluctuation may adversely affect our operating margins.

Almost all of our revenues are denominated in Renminbi. Conducting business in currencies other than U.S. dollars subjects us to fluctuations in currency exchange rates that could have a negative impact on our reported operating results. Fluctuations in the value of the U.S. dollar relative to other currencies impact our revenues, cost of revenues and operating margins and result in foreign currency translation gains and losses. If the exchange rate of the Renminbi is affected by lowering its value as against the U.S. dollar, our reported profitability when stated in U.S. dollars will

Regulation of loans and direct investment by offshore holding companies to Chinese entities may delay or prevent u

decrease. Historically, we have not engaged in exchange rate hedging activities and have no current intention of doing so.

We may not be able to adequately protect our technology and other proprietary rights.

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 both domestically and abroad. We have patents and patent applications pending in China, and have worked and continue to work closely with Chinese patent officials to preserve our intellectual property rights. Despite these efforts, any of the following occurrences may reduce the value of our intellectual property:

S-22

TABLE OF CONTENTS

Our applications for patents and trademarks relating to our business may not be granted and, if granted, may be challenged or invalidated;

Issued patents and trademarks may not provide us with any competitive advantages;

Our efforts to protect our intellectual property rights may not be effective in preventing misappropriation of our technology;

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.

S-23

TABLE OF CONTENTS**SUMMARY CONSOLIDATED FINANCIAL DATA**

The following table sets forth our summary financial data for the periods indicated. You should read this information together with Management's Discussion and Analysis of Financial Condition and Results of Operations and the financial statements and related notes incorporated by reference into this prospectus supplement. Historical financial information may not be indicative of our future performance and the results for the nine months ended September 30, 2010, are not necessarily indicative of the results that may be expected for the full fiscal year.

Consolidated Statement of Income Data:

	Nine months ended September 30,		Year ended December 31,	
	2010	2009	2009	2008
	(unaudited)			
Net sales	\$83,613,250	\$56,541,795	\$82,563,869	\$32,676,082
Cost of sales	54,177,914	36,562,363	53,467,805	21,717,735
Gross profit	29,435,336	19,979,432	29,096,064	10,958,347
Total operating expenses	10,595,119	4,952,245	10,920,865	3,416,670
Income from operations	18,840,217	15,027,187	18,175,199	7,541,677
Total (other expenses) other income	403,259	(203,161)	113,835	93,289
Income before provision for income taxes	19,243,476	14,824,026	18,289,034	7,634,966
Provision for income taxes	3,059,182	2,304,672	2,858,186	1,293,660
Minority interest	16,962		11,681	(5,966)
Net income	\$16,201,256	\$12,519,354	\$15,442,529	\$6,335,340
Other comprehensive income foreign currency translation adjustments	1,931,721	270,399	(14,641)	510,770
Comprehensive income	18,132,977	12,789,753	15,427,888	6,846,110
Weighted average number of common shares basic	32,804,292	24,430,806	26,535,502	22,176,322
Weighted average number of common shares diluted	32,846,171	24,513,092	26,592,066	22,176,432
Earnings per share basic	\$0.49	\$0.51	\$0.58	\$0.29
Earnings per share diluted	\$0.49	\$0.51	\$0.58	\$0.29

Consolidated Balance Sheet Data:

	As of September 30, 2010
Cash & cash equivalents	\$ 14,724,091
Total assets	142,459,504
Total liabilities	23,385,736
Total stockholders' equity	119,073,768

TABLE OF CONTENTS**USE OF PROCEEDS**

We expect to receive net proceeds of approximately \$23,400,000 from the sale of 5,000,000 shares of our common stock in this offering, based on a public offering price of \$5.00 per share, or \$26,962,500 if the underwriters exercise their over-allotment option in full, and after deducting the estimated expenses related to this offering and the underwriting discounts and commissions payable by us.

We intend to use the net proceeds from this offering for potential acquisitions, although no specific acquisition candidate has been identified to date, and general corporate purposes including the expansion of our product offerings and capital expenditures. The amounts and timing of the expenditures will depend on numerous factors, such as growth in our markets, technological advances and the competitive environment for our products.

CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2010:

on an actual basis; and

on an as-adjusted basis to reflect the receipt of the estimated net proceeds from our sale of 5,000,000 shares of common stock in this offering, based on a public offering price of \$5.00 per share, and after deducting underwriting commissions and estimated offering expenses paid or payable by us.

This table should be read in conjunction with our financial statements and the related notes, which are incorporated by reference to this prospectus supplement and the accompanying prospectus.

	September 30, 2010	
	Actual	As-Adjusted
Current Liabilities:		
Notes Payable - Bank Acceptances	\$ 1,516,865	\$ 1,516,865
Loans Payable	4,476,877	4,476,877
	\$ 5,993,742	\$ 5,993,742
Stockholders' Equity:		
Common stock, \$.001 par value, 75,000,000 shares authorized, 32,811,125 shares issued and outstanding at September 30, 2010, and 37,811,125 shares issued and outstanding on an as adjusted basis at September 30, 2010 ⁽¹⁾	\$ 32,811	\$ 37,811
Additional Paid-in Capital	75,163,813	98,558,813
Accumulated Foreign Currency Translation Adjustments	2,901,709	2,901,709
Statutory Reserves	4,613,151	4,613,151
Retained Earnings	35,673,363	35,673,363
Total Stockholders' Equity	\$ 118,384,847	\$ 141,784,847
Non-Controlling Interest	688,921	688,921
Total Capitalization	\$ 125,067,510	\$ 148,467,510

(1) The number of shares of common stock shown in the preceding table to be outstanding after this offering is based on 32,811,125 shares outstanding as of September 30, 2010, which excludes 96,775 shares of our common stock issuable upon exercise of warrants outstanding as of September 30, 2010, at an exercise price of \$6.00 per share;

stock options outstanding as of September 30, 2010, to purchase 63,333 shares of our common stock at an exercise price of \$10.32 per share; 500 shares of our common stock to be issued pursuant to a one-year consulting service agreement with a consultant; and 1,000,000 shares of our common stock reserved for issuance under our 2010 Equity Incentive Plan.

S-25

TABLE OF CONTENTS**PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY**

On April 22, 2008, our common stock became eligible for quotation on the OTC Bulletin Board (OTCBB) under the symbol SMHT. On January 29, 2009, our common stock commenced trading on the NASDAQ Capital Market under the symbol HEAT and was subsequently listed on the NASDAQ Global Market on March 10, 2009. The following table sets forth the range of the high and low bid prices per share of our common stock for each quarter (or portion thereof) beginning on April 22, 2008, and ending on November 17, 2010, as reported by the OTCBB for the period beginning on April 22, 2008, to January 28, 2009, and as reported on the Nasdaq Stock Market from January 29, 2009, to March 9, 2009, and on the Nasdaq Global Market thereafter. These quotations represent inter-dealer prices, without retail mark-up, markdown, or commission and may not represent actual transactions.

	High	Low
Second Quarter 2008 (April 22, 2008 – June 30, 2008)	\$ 4.60	\$ 2.00
Third Quarter 2008 (through September 30, 2008)	\$ 4.75	\$ 4.50
Fourth Quarter 2008 (through December 31, 2008)	\$ 6.50	\$ 2.25
First Quarter 2009 (through March 31, 2009)	\$ 6.20	\$ 5.50
Second Quarter 2009 (through June 30, 2009)	\$ 8.00	\$ 5.01
Third Quarter 2009 (through September 30, 2009)	\$ 10.36	\$ 5.83
Fourth Quarter 2009 (through December 31, 2009)	\$ 17.27	\$ 8.60
First Quarter 2010 (through March 31, 2010)	\$ 18.60	\$ 10.21
Second Quarter 2010 (through June 30, 2010)	\$ 10.93	\$ 5.32
Third Quarter 2010 (through September 30, 2010)	\$ 7.39	\$ 5.11
Fourth Quarter 2010 (through November 17, 2010)	\$ 8.11	\$ 5.65

On November 17, 2010, the closing sales price of our common stock was \$5.65.

As of November 17, 2010, there were 49 shareholders of record of our common stock. Since some of our shares of common stock are held in street or nominee name, it is believed that there are a substantial number of additional beneficial owners of our common stock.

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 that the board of directors considers significant.

TABLE OF CONTENTS**UNDERWRITING**

Barclays Capital Inc. is acting as the representative of the underwriters and is the sole book-running manager of this offering. Under the terms of an underwriting agreement, which we will file as an exhibit to our current report on Form 8-K and be incorporated by reference in this prospectus supplement and the accompanying prospectus, each of the underwriters named below has severally agreed to purchase from us the respective number of common stock shown opposite its name below:

Underwriters	Number of Shares
Barclays Capital Inc.	3,500,000
Oppenheimer & Co. Inc.	1,500,000
Total	5,000,000

The underwriting agreement provides that the underwriters' obligation to purchase shares of common stock depends on the satisfaction of the conditions contained in the underwriting agreement including:

the obligation to purchase all of the shares of common stock offered hereby (other than those shares of common stock covered by their option to purchase additional shares as described below), if any of the shares are purchased; the representations and warranties made by us to the underwriters are true; there is no material change in our business or in the financial markets; and we deliver customary closing documents to the underwriters.

Commissions and Expenses

The following table summarizes the underwriting discounts and commissions we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares. The underwriting fee is the difference between the initial price to the public and the amount the underwriters pay to us for the shares.

Per Share	No Exercise	Full Exercise
Total	\$ 0.25	\$ 0.25
	\$ 1,250,000	\$ 1,437,500

The representative of the underwriters has advised us that the underwriters propose to offer the shares of common stock directly to the public at the public offering price on the cover of this prospectus supplement and to selected dealers, which may include the underwriters, at such offering price less a selling concession not in excess of \$0.15 per share. After the offering, the representative may change the offering price and other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The expenses of the offering that are payable by us are estimated to be \$350,000 (excluding underwriting discounts and commissions).

Option to Purchase Additional Shares

We have granted the underwriters an option, exercisable for 30 days after the date of the underwriting agreement, to purchase, from time to time, in whole or in part, up to an aggregate of 750,000 shares at the public offering price less

underwriting discounts and commissions. This option may be exercised if the underwriters sell more than 5,000,000 shares in connection with this offering. To the extent that this option is exercised, each underwriter will be obligated, subject to certain conditions, to purchase its pro rata portion of these additional shares based on the underwriter's percentage underwriting commitment in the offering as indicated in the table at the beginning of this Underwriting section.

S-27

TABLE OF CONTENTS

Lock-Up Agreements

We, all of our directors and executive officers and three of our large shareholders have agreed that, subject to certain exceptions, without the prior written consent of Barclays Capital Inc., we and they will not directly or indirectly (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (including, without limitation, shares of common stock that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the Securities and Exchange Commission and shares of common stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common stock; (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock; (3) make any demand for or exercise any right or file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any of our other securities; or (4) publicly disclose the intention to do any of the foregoing for a period of 90 days after the date of this prospectus supplement.

The 90-day restricted period described in the preceding paragraph will be extended if:

during the last 17 days of the 90-day restricted period we issue an earnings release or material news or a material event relating to us occurs; or
prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day period;
in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or occurrence of material event, unless such extension is waived in writing by Barclays Capital Inc.

Barclays Capital Inc., in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. When determining whether or not to release common stock and other securities from lock-up agreements, Barclays Capital Inc. will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

Stabilization, Short Positions and Penalty Bids

The representative may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Securities Exchange Act of 1934:

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. In determining the source of

S-28

TABLE OF CONTENTS

shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make representation that the representative will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Passive Market Making NASDAQ Follow-On

In connection with the offering, underwriters and selling group members may engage in passive market making transactions in our common stock on the NASDAQ Global Market in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934 during the period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bids at a price not in excess of the highest independent bid of the security. However, if all independent bids are lowered below the passive market maker's bid that bid must be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus supplement and the accompanying prospectus in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters and/or selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the particular underwriter or selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the representative on the same basis as other allocations.

Other than the prospectus supplement and the accompanying prospectus in electronic format, the information on any underwriter's or selling group member's web site and any information contained in any other web site maintained by an underwriter or selling group member is not part of the prospectus supplement and the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus forms a part, has not been approved and/or endorsed by us or any underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

Stamp Taxes

If you purchase shares of common stock offered in this prospectus supplement and the accompanying prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus supplement and the accompanying prospectus.

S-29

TABLE OF CONTENTS

Relationships

Certain of the underwriters and their related entities have engaged, and may in the future engage, in commercial and investment banking transactions with us in the ordinary course of their business. They have received, and expect to receive, customary compensation and expense reimbursement for these commercial and investment banking transactions.

Selling Restrictions

European Economic Area

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of securities described in this prospectus supplement may not be made to the public in that relevant member state other than:

to any legal entity that is authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

to any legal entity that has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;

to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representative; or

in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive,

provided that no such offer of securities shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For purposes of this provision, the expression an offer of securities to the public in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each relevant member state.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the securities as contemplated in this prospectus supplement. Accordingly, no purchaser of the securities, other than the underwriters, is authorized to make any further offer of the securities on behalf of us, or the underwriters.

United Kingdom

This prospectus supplement is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive (Qualified Investors) that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred

to as relevant persons). This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

S-30

TABLE OF CONTENTS

Australia

No prospectus supplement or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia (Corporations Act)) in relation to the common stock has been or will be lodged with the Australian Securities & Investments Commission (ASIC). This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

- (a) you confirm and warrant that you are either:
- (i) a sophisticated investor under Section 708(8)(a) or (b) of the Corporations Act;
 - (ii) a sophisticated investor under Section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of Section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
 - (iii) a person associated with the company under Section 708(12) of the Corporations Act; or
 - (iv) a professional investor within the meaning of Section 708(11)(a) or (b) of the Corporations Act,
- and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and

you warrant and agree that you will not offer any of the shares of common stock for resale in Australia within 12 (b) months of those shares being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under Section 708 of the Corporations Act.

Hong Kong

The common stock may not be offered or sold in Hong Kong, by means of any document, other than (a) to professional investors as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made under that Ordinance or (b) in other circumstances which do not result in the document being a prospectus as defined in the Companies Ordinance (Cap. 32, Laws of Hong Kong) or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the common stock may be issued or may be in the possession of any person for the purpose of the issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to the common stock which are intended to be disposed of only to persons outside Hong Kong or only to professional investors as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) or any rules made under that Ordinance.

India

This prospectus supplement has not been and will not be registered as a prospectus with the Registrar of Companies in India or with the Securities and Exchange Board of India. This prospectus supplement or any other material relating to these securities is for information purposes only and may not be circulated or distributed, directly or indirectly, to the public or any members of the public in India and in any event to not more than 50 persons in India. Further, persons into whose possession this prospectus supplement comes are required to inform themselves about and to observe any such restrictions. Each prospective investor is advised to consult its advisors about the particular consequences to it of an investment in these securities. Each prospective investor is also advised that any investment in these securities by it is subject to the regulations prescribed by the Reserve Bank of India and the Foreign Exchange Management Act and any regulations framed thereunder.

TABLE OF CONTENTS

Japan

No securities registration statement (SRS) has been filed under Article 4, Paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) (FIEL) in relation to the common stock. The common stock are being offered in a private placement to qualified institutional investors (tekikaku-kan-toshika) under Article 10 of the Cabinet Office Ordinance concerning Definitions provided in Article 2 of the FIEL (the Ministry of Finance Ordinance No. 14, as amended) (QIIs), under Article 2, Paragraph 3, Item 2 i of the FIEL. Any QII acquiring the common stock in this offer may not transfer or resell those shares except to other QIIs.

Korea

The common stock may not be offered, sold and delivered directly or indirectly, or offered or sold to any person for reoffering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the Korea Securities and Exchange Act and the Foreign Exchange Transaction Law and the decrees and regulations thereunder. The common stock have not been registered with the Financial Services Commission of Korea for public offering in Korea. Furthermore, the common stock may not be resold to Korean residents unless the purchaser of the common stock complies with all applicable regulatory requirements (including but not limited to government approval requirements under the Foreign Exchange Transaction Law and its subordinate decrees and regulations) in connection with the purchase of the common stock.

Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common stock may not be circulated or distributed, nor may the common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Future Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person as defined in Section 275(2) of the SFA, or any person pursuant to Section 275 (1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the common stock are subscribed and purchased under Section 275 of the SFA by a relevant person, which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole whole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferable within six months after that corporation or that trust has acquired the common stock under Section 275 of the SFA except:
 - (i) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA) and in accordance with the conditions, specified in Section 275 of the SFA;
(in the case of a corporation) where the transfer arises from an offer referred to in Section 275(1A) of the SFA, or
 - (ii) (in the case of a trust) where the transfer arises from an offer that is made on terms that such rights or interests are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets;

- (iii) where no consideration is or will be given for the transfer; or
- (iv) where the transfer is by operation of law.

S-32

TABLE OF CONTENTS

By accepting this prospectus supplement, the recipient hereof represents and warrants that he is entitled to receive it in accordance with the restrictions set forth above and agrees to be bound by limitations contained herein. Any failure to comply with these limitations may constitute a violation of law.

VALIDITY OF THE SECURITIES

The validity of the shares of common stock offered in this prospectus supplement has been passed upon for us by Holland & Hart LLP, Reno, Nevada. The Newman Law Firm, PLLC has acted as corporate and securities counsel for the Company and, in connection with this offering, the Beijing Rondos Law Firm has acted as the PRC counsel for the Company. Morrison & Foerster LLP, New York, New York has acted as U.S. counsel for the underwriters.

EXPERTS

The consolidated financial statements for the years ended December 31, 2008 and 2009, incorporated in this prospectus by reference from the 2009 10-K have been audited by Goldman Kurland & Mohidin, LLP, an independent certified public accounting firm, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, which requires us to file reports and other information with the SEC. You can inspect and copy reports, proxy statements and other information filed by us at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549.

You can obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. You can obtain copies of this material by mail from the Public Reference Room of the SEC at 1580, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You can also obtain such reports, proxy statements and other information from the web site that the SEC maintains at <http://www.sec.gov>.

Reports, proxy statements and other information concerning us may also be obtained electronically at our website, <http://www.smartheatinc.com>, and through a variety of databases, including, among others, the SEC's Electronic Data Gathering and Retrieval (EDGAR) program, Knight-Ridder Information Inc., Federal Filing/Dow Jones and Lexis/Nexis. None of the information on those websites that is not otherwise expressly set forth in or incorporated by reference in this prospectus supplement is a part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The Securities and Exchange Commission, which we refer to as the SEC, allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which is commonly referred to as the

Edgar Filing: SMARTHEAT INC. - Form 424B3

Exchange Act:

Annual Report on Form 10-K for the year ended December 31, 2009;
Quarterly Reports on Form 10-Q for the quarters ended March 31, 2010, June 30, 2010, and September 30, 2010;
Current Reports on Form 8-K filed on August 12, 2010, May 26, 2010, May 5, 2010, March 31, 2010, and February 4, 2010; and

Our Definitive Proxy Statement on Schedule 14A dated April 16, 2010.

S-33

TABLE OF CONTENTS

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Ms. Jane Ai, Corporate Secretary
SmartHeat Inc.
Tel: 011-86-24-25363366
Email: info@SmartHeatinc.com

You should rely only on the information or representations provided in or incorporated by reference into this prospectus supplement and the accompanying base prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement, the accompanying base prospectus or any supplement hereto or thereto is accurate as of any date other than the date on the front of those documents.

S-34

TABLE OF CONTENTS

PROSPECTUS

\$100,000,000

SMARTHEAT, INC.

**Common Stock
Warrants
Debt Securities
Units
Rights**

We may from time to time, in one or more offerings at prices and on terms that we will determine at the time of each offering, sell common stock, warrants, debt securities, rights or a combination of these securities, or units, for an aggregate initial offering price of up to \$100,000,000. This prospectus describes the general manner in which our securities may be offered using this prospectus. Each time we offer and sell securities, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

Our common stock is currently traded on the NASDAQ Global Market under the symbol HEAT. On October 13, 2010, the last reported sales price for our common stock was \$7.05 per share. We will apply to list any shares of common stock sold by us under this prospectus and any prospectus supplement on the NASDAQ Global Market. The prospectus supplement will contain information, where applicable, as to any other listing of the securities on the NASDAQ Global Market or any other securities market or exchange covered by the prospectus supplement.

As of October 13, 2010, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$135,254,426, based on 32,811,125 shares of outstanding common stock, of which approximately 19,185,025 shares are held by non-affiliates, and a per share price of \$7.05, based on the closing sale price of our common stock on October 13, 2010.

The securities offered by this prospectus involve a high degree of risk. See Risk Factors beginning on page 9, in addition to Risk Factors contained in the applicable prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

We may offer the securities directly or through agents or through underwriters or dealers. If any agents or underwriters are involved in the sale of the securities, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. We can sell the securities through agents, underwriters or dealers only with delivery of a prospectus supplement describing the method and terms of the offering of such securities. See Plan of Distribution in this prospectus.

This prospectus is dated November 2, 2010

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>NOTE ON FORWARD-LOOKING STATEMENTS</u>	<u>2</u>
<u>PROSPECTUS SUMMARY</u>	<u>3</u>
<u>RISK FACTORS</u>	<u>9</u>
<u>USE OF PROCEEDS</u>	<u>9</u>
<u>PLAN OF DISTRIBUTION</u>	<u>9</u>
<u>DESCRIPTION OF SECURITIES WE MAY OFFER</u>	<u>12</u>
<u>LEGAL MATTERS</u>	<u>24</u>
<u>EXPERTS</u>	<u>24</u>
<u>WHERE YOU CAN FIND MORE INFORMATION ABOUT US</u>	<u>24</u>
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	<u>24</u>
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES</u>	<u>25</u>
<u>ACT LIABILITIES</u>	<u>25</u>

i

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the SEC) using a shelf registration process. Under this shelf registration process, we may offer from time to time securities having a maximum aggregate offering price of \$100,000,000. Each time we offer securities, we will prepare and file with the SEC a prospectus supplement that describes the specific amounts, prices and terms of the securities we offer. The prospectus supplement also may add, update or change information contained in this prospectus or the documents incorporated herein by reference. You should read carefully both this prospectus and any prospectus supplement together with additional information described below under the caption **Where You Can Find More Information**, before making an investment decision.

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. For further information about us or our securities offered hereby, you should refer to that registration statement, which you can obtain from the SEC as described below under **Where You Can Find More Information**.

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities, in any jurisdiction where the offer or sale is not permitted.

You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the SEC and incorporated by reference, is accurate as of the date of those documents only. Our business, financial condition, results of operations and prospects may have changed since those dates.

We may sell securities through underwriters or dealers, through agents, directly to purchasers or through a combination of these methods. We and our agents reserve the sole right to accept or reject in whole or in part any proposed purchase of securities. The prospectus supplement, which we will prepare and file with the SEC each time we offer securities, will set forth the names of any underwriters, agents or others involved in the sale of securities, and any applicable fee, commission or discount arrangements with them. See **Plan of Distribution**.

Unless otherwise mentioned or unless the context requires otherwise, when used in this prospectus, the terms SmartHeat, Company, we, us, and our refer to SmartHeat Inc. (SmartHeat) and its subsidiaries. China and refer to the People's Republic of China.

TABLE OF CONTENTS

NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus or any accompanying prospectus supplement, including the documents that we incorporate by reference, may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. Any forward-looking statements are based on our current expectations and projections about future events and are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as expects, anticipates, intends, estimates, plans, believes, seeks, may, should, could or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the risk factors described herein and those included in any accompanying prospectus supplement or in any document incorporated by reference into this prospectus.

You should read this prospectus and any accompanying prospectus supplement and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus is part, completely and with the understanding that our actual future results may be materially different from what we currently expect. You should assume that the information appearing in this prospectus, any accompanying prospectus supplement and any document incorporated herein by reference is accurate as of its date only. Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information that constitutes forward-looking statements presented in this prospectus, any accompanying prospectus supplement and any document incorporated herein by reference, by these cautionary statements.

These forward-looking statements include but are not limited to statements relating to:

- 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 and heat meters 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 effectively protect our intellectual property rights 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.

2

TABLE OF CONTENTS

PROSPECTUS SUMMARY

The following summary highlights selected information contained elsewhere in this prospectus, and the documents incorporated herein by reference. This summary does not contain all of the information you should consider before investing in our Securities. Before deciding to invest in our Securities, you should read this entire prospectus, any prospectus supplement, and the documents incorporated herein and therein, including the discussion of Risk Factors and our consolidated financial statements and the related notes. Moreover, the information contained in this prospectus includes forward-looking statements, which are based on current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments actually affecting us will be those anticipated. Please see page 3 of the accompanying prospectus for cautionary information regarding forward-looking statements.

Our Company

We are a leading designer, manufacturer and seller of clean technology heat exchangers and related systems in the People's Republic of China (China). Our products are used by our customers in the industrial, residential and commercial markets in China to improve energy utilization and efficiencies and reduce pollution by reducing the need for coal fired boilers. We design, manufacture, sell and service plate heat exchangers (PHEs), PHE units, which combine PHEs with various pumps, temperature sensors, valves and automated control systems (PHE Units), and heat meters 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 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 (HVAC) and industrial use in petroleum refining, petrochemicals, metallurgy, food and beverage and chemical processing. Our PHE Units are custom designed by our own in-house engineers and sold under our own Taiyu brand name, while our PHEs are sold under both our Taiyu brand as well as the Sondex brand name.

A PHE is a device that transfers energy from one fluid to another across a solid surface. PHEs are made of stainless steel, titanium or nickel alloy plates that are sealed by gaskets and then bolted together in a large metal frame that holds the plates together. Plates come in a variety of sizes and wave patterns; have large heat transfer surfaces and high thermal conductivity. The quantity and size of the plates and size of the PHEs and PHE Units vary according to particular application requirements.

Among the primary advantages of plate heat exchangers as compared to traditional shell and tube heat exchangers are their efficiency, compact design and ease of customization. PHEs have larger heat transfer surface areas and therefore greater thermal conductivity. As a result, PHEs can transfer the same amount of heat as a traditional shell and tube heat exchanger despite the small size of the PHE. In China, coal is the predominant source of heat energy, and coal burning is a significant contributor to carbon dioxide (CO₂) emissions. According to International Energy Statistics provided by the Energy Information Administration, a subdivision of the United States Department of Energy, in 2007, the consumption of coal accounted for 27% of the total primary energy consumption in the world. China was the largest producer of CO₂ from the consumption of coal in 2008, accounting for 41.7% of the world total.

The PRC government's 11th Five-Year Plan (the 11th Five-Year Plan), announced in 2006, targeted a 20% reduction in energy consumption per unit of GDP and a 10% reduction in industry expulsion of pollutant particles by 2010. Management expects further reductions will be included in the upcoming 12th Five-Year Plan. As the Chinese

government begins to require the use of machines that produce more efficient heat transfer and utilize waste heat energy, PHEs will be an important element in reducing overall coal consumption in China, which will translate into lower heating costs, lower CO₂ emissions for users and less pollution to the environment. According to the Chinese government, China has cut energy use per unit of GDP by 14.38 percent between 2006 and 2009 and it aims to cut carbon dioxide output per unit of GDP by at least 40 percent by 2020 compared with 2005 levels.

We currently focus predominantly on the Chinese market. 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. In May of 2009, we acquired the production assets of Siping Beifang Heat Exchanger, Manufacture Co., Ltd.

TABLE OF CONTENTS

(Siping Beifang), one of the major plate heat exchanger manufacturers in China, and began a program to vertically integrate our supply chain for our own PHE components and, at the same time, supplement our relationship with our main supplier, Sondex. As a result, we now manufacture our own plates, tubes, and gaskets and can design and manufacture PHEs and PHE Units using either supply source for the component plates. Our new plates provide solutions for a market segment with strong demand for PHE products that are priced 10 – 15% lower than PHE products with Sondex plates.

In early 2006 we launched a third product line, heat meters, which utilize the same sales channels and allow us to provide heat consumption information to users. Heat meters precisely measure the volume of heat usage, which is an important revenue stream for utility companies. While home owners commonly use heat meters in western countries, widespread incorporation of heat meters has only recently taken hold in China. As of July 2003, heat meters were required nationally by law for new construction installed with central heating and the law was extended in April of 2008 by the Energy Conservation Law, Article 38, to existing buildings being retrofitted. This law implies that heat meters be installed in new residential construction and retrofitted buildings. We believe there are significant opportunities for strong incremental growth as the Chinese government continues to focus on ways to cost effectively monitor and conserve energy.

PHE

PHE Unit

Heat Meter

Source: The Company

From 2006 to 2009, our total revenue increased from \$8.2 million to \$82.6 million, a compound annual growth rate (CAGR) of 116.0%. Our net income has grown at a 168.0% CAGR from \$0.8 million in 2006 to \$15.4 million in 2009.

Our company is headquartered in Shenyang China where we have a 210,137 square foot state of the art production facility. We operate two other production and assembly facilities in China. As of September 24, 2010 we had approximately 744 regular full-time employees and approximately 149 seasonal employees.

Our principal offices are located at A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110027. Our telephone number is 86 (24) 2519-7699.

Our Industry

We address the utility and industrial sectors throughout China. Participants in these industries are large users of PHEs, PHE Units and related accessories. We also address the HVAC sector. Participants in this industry are large users of heat meters. We also provide after sale services on our PHEs, PHE Units and heat meters to these industries. These services include maintenance, repair, and supplying spare parts.

TABLE OF CONTENTS

According to *China Heat Exchanger Industry Report* (hereinafter referred to as the Industry Report) issued by Zero Power Intelligence Co., Ltd., an independent market research firm in China, the world heat exchanger market has grown significantly in the past several years. Global sales of heat exchangers grew from \$29.7 billion in 2005 to \$38.6 billion in 2008, or 30%, and are expected to grow to \$55.3 billion in 2012, or 43% in the four-year period from 2009 to 2012.

According to the Industry Report, China has become the second largest market and one of the fastest growing markets for heat exchangers. The sales of heat exchangers in China grew from \$3.2 billion in 2005 to \$5.4 billion in 2008, or 70%, and are projected to grow to \$11.0 billion in 2012, or 106% in the four-year period from 2009 to 2012.

Currently, there are social, economic, environmental, regulatory and government stimulus-related 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 amounted to an estimated \$100 billion a year. Moreover, the report found that air pollution, especially in large Chinese 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 currently provides households throughout 17 of its 34 northern provinces with heating water. As new cities grow 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 which pump emitted hot water from the power plant through a closed loop system to a water heating company and then through a network of pipes up to a distance of 50 kilometers. These systems of heating stations and sub-stations utilize numerous PHEs and PHE Units, which provide a dual purpose: a cooling system for the power plants and a heat source for residents and factories.

Heightened Environmental Awareness. Management expects the PRC government's upcoming 12th Five Year Plan to target a 40-45% reduction in energy consumption per unit of GDP from 2005 levels. 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 their increased energy efficiency.

Urbanization. According to the CIA World Factbook, 43% of China's population lived in urban settings in 2008. Additionally, according to the National Bureau of Statistics of China, 15 cities near and around SmartHeat's sales and service centers have a population of more than five million. Eight of these Chinese cities are among the world's fastest growing, increasing at an annual rate of 2.5% or more. China's urbanization has led to new infrastructure development and existing infrastructure improvements that require ongoing investment in heating solutions.

Government Stimulus. On November 5, 2008, China's State Council approved a \$586 billion plan to invest in infrastructure and social welfare. On March 6, 2009, China's National Development and Reform Commission revised this plan to include \$31 billion to be partially allocated to energy-saving projects. These funds are required to be spent by the end of 2010. In addition, on April 2, 2010 the Chinese National Development and Reform Commission issued an *Opinion on Expediting the Implementation of Energy Performance Contracting for Promoting Energy Saving Service Industry Development* which directed all local governments to budget funds to invest in and support energy saving industries.

Emerging Wealth. The rapidly expanding middle class in China is now demanding 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.

TABLE OF CONTENTS

Our Competitive Strengths

We believe we have the following competitive strengths:

Provider of Key Elements Used to Improve Energy Efficiencies and Reduce Coal Pollution. We offer a full line of PHEs, PHE Units and heat meters. 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 Leader and Brand Name in the Growing China Heating Industry. We have established a leading brand name in the fragmented Chinese heating industry and seek to utilize this awareness to become the leading Chinese supplier of PHEs, PHE Units and related products in the rapidly growing Chinese market. We are a leading domestic producer of PHE Units under the Taiyu brand and management estimates that we have approximately a 10 – 12% share of the PHE Unit market based on our internal market research which tracks PHE projects in China valued over \$1.5 million. We believe the Taiyu brand name is recognized for its quality and efficiency, which we believe we can leverage to improve our reputation as a leading seller of 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 nine registered patents in China for PHE products and heat meters. We have two patents for our plate heat exchangers, one for our heat transfer system for space heating and domestic hot water, one for a heat meter cleaning pipe, two for our heat meter testing system, one for an integrated heat transfer system, one for an efficient-heat testing bench, and one for a filter. Five of our patents expire in 2014, one expires in 2016, one expires in 2010, and two expire in 2017. To maintain our competitive edge in the marketplace and keep pace with new technologies, we fund research and development on an on-going basis to find improved efficiencies in design, cost and energy capture. Research and development costs for 2008 and 2009 were \$1,020,000 and \$1,360,000, respectively. We plan to continue to invest in research and development to identify new industry applications for PHEs, improve 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 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 design systems are integrated with our real-time enterprise resource planning (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 National Safety Certification for our PHE products, and are an ISO 9001 certified manufacturer.

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 sale service 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 (i.e., conventional and nuclear power plants), HVAC, petroleum

TABLE OF CONTENTS

refining, petrochemicals, metallurgy, food and beverage and chemical processing end markets. We also benefit from a diverse customer mix. For the fiscal year ended December 31, 2009, our ten largest customers accounted for 47% of sales and our largest customer accounted for 7% of sales. This end market and customer diversification helps to insulate us from sales volatility that would occur if we concentrated in specific industries. The bulk of our customers are utilities, engineering and construction companies and industrial companies.

Proven Ability to Identify and Acquire Strategic Targets. Over the past 24 months, we have completed two strategic acquisitions. Each acquisition has accelerated our strategic plan by: (i) adding manufacturing capacity; (ii) broadening our product offering 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; or (vi) helping us enter new and higher growth end markets. We have proven our ability to complete successful acquisitions and believe there are additional acquisition opportunities both in the Chinese domestic market and internationally which we may potentially pursue.

Experienced Management Team. Our senior management team has extensive business and industry experience. Mr. Jun Wang, our president and CEO, was the founder of Taiyu in 2002. He was a sales manager for Honeywell International Inc. from 1996 to 1999 and was a sales manager for Alfa Laval from 1994 to 1996. Mr. Wang obtained his Master's degree in Engineering from Tsinghua University in 1989. Ms. Zhijuan Guo, our CFO, has 14 years of finance and accounting experience and has been with the Company since its inception in 2002. Mr. Xudong Wang, our VP of strategy and development has served as the VP of an international financial firm. Mr. Wen Sha, our VP of marketing, has extensive sales experience and industry contacts. He joined SmartHeat as a Regional Sales Manager in 2005. Prior to that, 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. Mr. Feng Chen, Ph.D., our CTO, joined SmartHeat in 2008 as part of our SanDeKe acquisition. Prior to founding SanDeKe, he served in a leading engineering position in China with Alfa Laval.

Our Growth Strategy

Our goal is to further penetrate the many market segments throughout China for PHEs, PHE Units and related accessories, expand our PHE Unit sales both domestically and internationally, promote the sale of heat meters and execute strategic acquisitions that are accretive and synergistic to our business.

Pursue High Growth Chinese End Markets. We are targeting our sales efforts on a number of high growth Chinese end markets such as power and petrochemical. 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.

Continue Organic Growth Initiatives. We believe that the current PHE market is fragmented and represents an excellent opportunity for us to gain additional market share from our competitors. We intend to open new sales offices, hire additional sales personnel, expand into new distribution channels and improve the quality of our products. We also intend to leverage our strong brand, quality customer service, engineering 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 product lines.

Promote Heat Meters. In response to rising energy costs and an increased focus on energy efficiency, the Chinese 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 buildings installed with central heating and the law was extended in April of 2008 by the Energy Conservation Law, Article 38, to buildings being retrofitted. We are currently working with the General Administration of Quality Supervision and Quarantine, an administrative organ established under the PRC's State Council, to establish a national heating standard in China. We also intend to leverage the Taiyu brand and our reputation in the PHE market to gain market share.

7

TABLE OF CONTENTS

Expand Internationally. We are continuing to seek additional opportunities to expand our business internationally. We plan to cooperate with a number of international energy contractors to help promote our products outside of China and will review international acquisition opportunities and joint venture opportunities for international growth.

Execute Strategic Acquisitions. We intend to continue to selectively acquire domestic or international targets that would enable us to enter new customer segments or gain entry into new industries. For example, the acquisition of the plant and machinery and land use rights from Siping Beifang in May of 2009 provided us with an entrance into the petrochemical and high pressure chemical end markets, which were previously immaterial segments for us. We also acquired SanDeKe in September of 2008 which increased our PHE and PHE Unit production capacity. Due to the high pressure and heat tolerance demands of the petrochemical industry, we have also acquired valuable engineering expertise that may help us address the nuclear energy segment in a meaningful way. Management believes it has a strong track record of acquiring companies that fit our strategic goals of reducing pollution and saving energy, and of successfully integrating their operations so they are accretive to earnings and contribute to our rapid growth. We will continue to identify and review targets that are accretive to our earnings, easily integrated into our existing infrastructure and synergistic to our operations.

TABLE OF CONTENTS

RISK FACTORS

Investing in our securities involves risk. The prospectus supplement applicable to a particular offering of securities will contain a discussion of the risks applicable to an investment in the Company and to the particular types of securities that we are offering under that prospectus supplement. Before making an investment decision, you should carefully consider the risks described under Risk Factors in the applicable prospectus supplement and the risks described in our most recent Annual Report on Form 10-K, or any updates to our risk factors in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment.

RATIO OF EARNINGS TO FIXED CHARGES

Not applicable to smaller reporting companies.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities covered by this prospectus for capital expenditures and acquisitions of new technologies or businesses. While we have not identified any specific acquisition candidates at this time, we believe that we will require additional financing to complete acquisitions that fit our strategic objectives. The precise amount, use and timing of the application of such proceeds will depend upon our funding requirements and the availability and cost of other capital. Additional information on the use of net proceeds from an offering of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

PLAN OF DISTRIBUTION

We may sell the securities described in this prospectus to or through underwriters, through dealers, through agents, or directly to one or more purchasers or through a combination of these methods. The applicable prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if any, and if required, any dealers or agents;
- the public offering price or purchase price of the securities and the net proceeds to us from the sale of the securities;
- any underwriting discounts and other items constituting underwriters' compensation;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed or traded.

We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

Sales Through Underwriters or Dealers

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

9

TABLE OF CONTENTS

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent, and the underwriters will be obligated to purchase all of the offered securities, if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly for the purpose of resale or distribution, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the common stock by them may be deemed to be underwriting discounts and commissions under the Securities Act. Pursuant to a requirement by the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker-dealer may not be greater than eight percent (8%) of the gross proceeds received by us for the sale of any securities being registered pursuant to SEC Rule 415 under the Securities Act of 1933.

Direct Sales and Sales Through Agents

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

Delayed Delivery Contracts

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the

commissions we must pay for solicitation of these contracts in the prospectus supplement.

TABLE OF CONTENTS

Market Making, Stabilization and Other Transactions

To facilitate the public offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Unless otherwise specified in the applicable prospectus supplement, any common stock sold pursuant to a prospectus supplement will be eligible for listing on The NASDAQ Global Market, subject to official notice of issuance. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

Derivative Transactions

In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

Electronic Auctions

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you will want to pay particular attention to the description of that system we will provide in a prospectus supplement.

Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called real-time basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

TABLE OF CONTENTS

General Information

We may provide agents, underwriters and other purchasers with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents, underwriters or other purchasers may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

DESCRIPTION OF THE SECURITIES WE MAY OFFER

General

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, up to \$100,000,000 in the aggregate of

shares of our common stock;

debt securities, in one or more series;

warrants to purchase our debt or equity securities; or

rights to purchase our debt, equity securities, or units consisting of one or more of the foregoing; or any combination of the foregoing, either individually or as units consisting of one or more of the foregoing, each on terms to be determined at the time of sale.

We may issue debt securities that are exchangeable for or convertible into shares of our common stock. When a particular series of securities is offered, a supplement to this prospectus will be delivered with this prospectus, which will set forth the terms of the offering and sale of the offered securities, as well as complete descriptions of the security or securities to be offered pursuant to the prospectus supplement. The summary descriptions of securities included in this prospectus are not meant to be complete descriptions of each security. This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

Common Stock

The following description of common stock, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the common stock that we may offer under this prospectus. For the complete terms of our common stock, please refer to our articles of incorporation, as may be amended from time to time, and our bylaws, as amended from time to time. The Nevada Business Corporation Act may also affect the terms of these securities. While the terms we have summarized below will apply generally to any future common stock that we may offer, we will describe the specific terms of any series of these securities in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any common stock we offer under that prospectus supplement may differ from the terms we describe below.

As of October 13, 2010, our authorized capital stock consists of 75,000,000 shares of common stock, par value \$0.001 per share, of which 32,811,125 shares are issued and outstanding. The authorized and unissued shares of common

stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. Unless approval of our stockholders is so required, our board of directors will not seek stockholder approval for the issuance and sale of our common stock.

The holders of our common stock are entitled to one vote for each share held of record. The affirmative vote of a majority of shares present in person or represented by proxy at a meeting of stockholders that commences with a lawful quorum is sufficient for approval of matters upon which stockholders may vote,

TABLE OF CONTENTS

including questions presented for approval or ratification at the annual meeting. Our common stock does not carry cumulative voting rights, and holders of more than 50% of our common stock have the power to elect all directors and, as a practical matter, to control our company. Holders of our common stock are not entitled to preemptive rights, conversion rights, and no redemption provisions are applicable to our common stock. Any action other than the election of directors shall be authorized by a majority of the votes cast, except where the Nevada Business Corporation Act prescribes a different percentage of votes and/or exercise of voting power.

After the satisfaction of requirements with respect to preferential dividends, if any, holders of our common stock are entitled to receive, pro rata, dividends when and as declared by our board of directors out of funds legally available therefore. Upon our liquidation, dissolution or winding-up, after distribution in full of the preferential amount, if any, holders of our common stock are entitled to share ratably in our assets legally available for distribution to our stockholders. All outstanding shares of common stock are fully paid and non-assessable.

As of October 13, 2010 we had outstanding warrants to purchase a total of 96,775 shares of our Common Stock and we had outstanding options to purchase 63,333 shares of our Common Stock.

Our common stock is listed on The NASDAQ Global Market under the symbol HEAT. The transfer agent and registrar for our common stock is Interwest Transfer Company, Inc. located at 1981 Murray Holladay Road, Suite 100, Salt Lake City, UT 84117. Their telephone number is (801) 272-9249.

Debt Securities

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will generally apply to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below. As of the date of this prospectus, we have no outstanding registered debt securities.

As used in this prospectus, debt securities means the debentures, notes, bonds and other evidences of indebtedness that we may issue from time to time. The debt securities may be either secured or unsecured and will either be senior debt securities or subordinated debt securities. The debt securities will be issued under one or more separate indentures between us and a trustee to be specified in an accompanying prospectus supplement. Senior debt securities will be issued under a new senior indenture. Subordinated debt securities will be issued under a subordinated indenture. Together, the senior indentures and the subordinated indentures are sometimes referred to in this prospectus as the indentures. This prospectus, together with the applicable prospectus supplement, will describe the terms of a particular series of debt securities.

The indentures will be qualified under the Trust Indenture Act of 1939. We use the term debenture trustee to refer to either the senior trustee or the subordinated trustee, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement related to the debt securities that we sell under this prospectus, as well as the complete indentures that contain the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior and the subordinated indentures are identical.

General

The terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth or determined in the manner provided in an officers certificate or by a supplemental indenture. Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series. The particular terms of each series of debt securities will be described in a prospectus supplement relating to such series, including any pricing supplement.

TABLE OF CONTENTS

The prospectus supplement will set forth:

the title;

the name of the trustee(s) and the nature of any material relationship with the registrant or with any of its affiliates;
the principal amount being offered, and, if a series, the total amount authorized and the total amount outstanding;

any limit on the amount that may be issued;

whether or not we will issue the series of debt securities in global form and, if so, the terms and who the depository will be;

the maturity date;

whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a U.S. person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate, the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, the conditions upon which, and the price at which we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions, and any other applicable terms of those redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the indenture will restrict our ability and/or the ability of our subsidiaries to, among other things,:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with stockholders and affiliates;

TABLE OF CONTENTS

issue or sell stock of our subsidiaries; or
effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of any material or special U.S. federal income tax considerations applicable to the debt securities;

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an original issue discount as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;

the procedures for any auction and remarketing, if any;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

if other than dollars, the currency in which the series of debt securities will be denominated; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any events of default that are in addition to those described in this prospectus or any covenants provided with respect to the debt securities that are in addition to those described above, and any terms that may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for common stock or other securities of ours or a third party, including the conversion or exchange rate, as applicable, or how it will be calculated, and the applicable conversion or exchange period. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of our securities or the securities of a third party that the holders of the series of debt securities receive upon conversion or exchange would, under the circumstances described in those provisions, be subject to adjustment, or pursuant to which those holders would, under those circumstances, receive other property upon conversion or exchange, for example in the event of our merger or consolidation with another entity.

Consolidation, Merger or Sale

The indentures in the forms initially filed as exhibits to the registration statement of which this prospectus is a part do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor of ours or the acquirer of such assets must assume all of our obligations under the indentures and the debt securities.

If the debt securities are convertible for our other securities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

TABLE OF CONTENTS

Events of Default Under the Indenture

The following are events of default under the indentures in the forms initially filed as exhibits to the registration statement with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended or deferred;

if we fail to pay the principal, sinking fund payment or premium, if any, when due and payable and the time for payment has not been extended or delayed;

if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the debenture trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the debenture trustee or the holders of at least 35% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the debenture trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the debenture trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable indenture; and subject to its duties under the Trust Indenture Act of 1939, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding. A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

the holder has given written notice to the debenture trustee of a continuing event of default with respect to that series; the holders of at least 35% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity, to the debenture trustee to institute the proceeding as trustee; and

the debenture trustee does not institute the proceeding and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

TABLE OF CONTENTS

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the debenture trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

We and the debenture trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under Consolidation, Merger or Sale ;
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act of 1939;
- to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
- to provide for uncertificated debt securities and to make all appropriate changes for such purpose;
- to add to, delete from, or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issuance, authorization and delivery of debt securities or any series, as set forth in the indenture;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under General to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default, or to surrender any of our rights or powers under the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the debenture trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

TABLE OF CONTENTS

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except that the following obligations survive until the maturity date or the redemption date:

register the transfer or exchange of debt securities of the series;
replace stolen, lost or mutilated debt securities of the series;
maintain paying agencies;
hold monies for payment in trust; and
appoint any successor trustee;
and the following obligations survive the maturity date or the redemption date:

recover excess money held by the debenture trustee; and
compensate and indemnify the debenture trustee.

In order to exercise our rights to be discharged, we must deposit with the debenture trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, known as DTC, or another depository named by us and identified in a prospectus supplement with respect to that series. See *Legal Ownership of Securities* for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of any series being redeemed in part during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

18

TABLE OF CONTENTS

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that, unless we otherwise indicate in the applicable prospectus supplement, we may make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

Subordination of Subordinated Debt Securities

The subordinated debt securities will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The indentures in the forms initially filed as exhibits to the registration statement of which this prospectus is a part do not limit the amount of indebtedness that we may incur, including senior indebtedness or subordinated indebtedness, and do not limit us from issuing any other debt, including secured debt or unsecured debt.

Warrants

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and any related warrant agreement and warrant certificate. While the terms summarized below will apply generally to any

warrants that we may offer, we will describe the specific terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a report filed under the Exchange Act.

General

We may issue warrants for the purchase of common stock, and/or debt securities in one or more series. We may issue warrants independently or together with common stock and/or debt securities, and the warrants may be attached to or separate from these securities.

TABLE OF CONTENTS

We will evidence each series of warrants by warrant certificates that we may issue under a separate agreement. We may enter into a warrant agreement with a warrant agent. Each warrant agent may be a bank that we select which has its principal office in the United States. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock, the number or amount of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which and currency in which these shares may be purchased upon such exercise;
- the manner of exercise of the warrants, including any cashless exercise rights;
- the warrant agreement under which the warrants will be issued;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- anti-dilution provisions of the warrants, if any;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire or, if the warrants are not continuously exercisable during that period, the specific date or dates on which the warrants will be exercisable;
- the manner in which the warrant agreement and warrants may be modified;
- the identities of the warrant agent and any calculation or other agent for the warrants;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;
- any securities exchange or quotation system on which the warrants or any securities deliverable upon exercise of the warrants may be listed or quoted; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

TABLE OF CONTENTS

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. Eastern time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required exercise price by the methods provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate, and in the applicable prospectus supplement, the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants.

Enforceability of Rights By Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action the holder's right to exercise, and receive the securities purchasable upon exercise of, its warrants in accordance with their terms.

Warrant Agreement Will Not Be Qualified Under Trust Indenture Act

No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act with respect to their warrants.

Governing Law

Each warrant agreement and any warrants issued under the warrant agreements will be governed by New York law.

Calculation Agent

Any calculations relating to warrants may be made by a calculation agent, an institution that we appoint as our agent for this purpose. The prospectus supplement for a particular warrant will name the institution that we have appointed to act as the calculation agent for that warrant as of the original issue date for that warrant, if any. We may appoint a different institution to serve as calculation agent from time to time after the original issue date without the consent or notification of the holders. The calculation agent's determination of any amount of money payable or securities deliverable with respect to a warrant will be final and binding in the absence of manifest error.

TABLE OF CONTENTS

Rights

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the rights that we may offer under this prospectus and the related rights agreements. While the terms summarized below will apply generally to any rights that we may offer under this prospectus, we will describe the particular terms of any series of rights that we may offer in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any rights offered under that prospectus supplement may differ from the terms described below. However, no prospectus supplement shall fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. Specific rights agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a report filed under the Exchange Act.

General

We may issue rights to purchase common stock, debt securities, warrants, or units. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we may enter into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. We may also choose to act as our own rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights. We will file the rights agreement and the rights certificates relating to each series of rights with the SEC, and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of rights.

We will describe in the applicable prospectus supplement the terms of the series of rights, including:

the date of determining the stockholders entitled to the rights distribution;
the number of rights issued or to be issued to each stockholder;

the exercise price payable for each share of common stock, preferred stock or other securities upon the exercise of the rights;

the number and terms of the shares of common stock, preferred stock or other securities which may be purchased per each right;

the extent to which the rights are transferable;

the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;

the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities; if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and

any other terms of the rights, including the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The description in the applicable prospectus supplement of any rights that we may offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable rights certificate, which will be filed with

the SEC.

TABLE OF CONTENTS

Exercise of Rights

Each right will entitle the holder of the right to purchase for cash such amount of shares of common stock, debt securities, warrants or units at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised at any time up to the close of business on the expiration date for such rights set forth in the prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

Rights may be exercised as set forth in the prospectus supplement relating to the rights offered thereby. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will forward, as soon as practicable, the shares of common stock, debt securities, warrants or units purchasable upon such exercise. We may determine to offer any unsubscribed offered securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as set forth in the applicable prospectus supplement.

Governing Law

The rights and rights agreements will be governed by and construed in accordance with the laws of the State of New York.

Units

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date or occurrence.

The applicable prospectus supplement may describe:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and

any unit agreement under which the units will be issued;
whether the units will be issued in fully registered or global form.

The applicable prospectus supplement will describe the terms of any units. The preceding description and any description of units in the applicable prospectus supplement does not purport to be complete and is subject to and is qualified in its entirety by reference to the unit agreement and, if applicable, collateral arrangements and depository arrangements relating to such units.

TABLE OF CONTENTS

LEGAL MATTERS

Certain legal matters governed by the laws of the State of Nevada with respect to the validity of the offered securities will be passed upon for us by Holland & Hart LLP, Reno, Nevada.

EXPERTS

The consolidated balance sheet of SmartHeat Inc. and subsidiaries as of December 31, 2009 and 2008 and the related consolidated statements of income and other comprehensive income, changes in stockholders' equity, and cash flows for the year ended December 31, 2009 and 2008 incorporated by reference herein have been audited by Goldman Kurland Mohidin LLP, independent registered public accountants, as stated in their report, and have been incorporated by reference in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION ABOUT US

We have filed a registration statement on Form S-3 with the SEC for the securities we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. We will provide this information upon oral or written request, free of charge. Any requests for this information should be made by calling or sending a letter to the Secretary of the Company, c/o SmartHeat Inc., at our office located at A-1, 10, Street 7, Shenyang Economic and Technological Development Zone, Shenyang, China 110027. Our telephone number is (86) (24) 2519-7699.

We are required to file annual and quarterly reports, current reports, proxy statements, and other information with the SEC. You can read our SEC filings, including the registration statement, on the SEC's website at <http://www.sec.gov>. You also may read and copy any document we file with the SEC at its public reference facility at:

Public Reference Room
100 F Street N.E.
Washington, DC 20549.

Please call the SEC at 1-800-732-0330 for further information on the operation of the public reference facilities.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by us with the Securities and Exchange Commission are incorporated by reference in this prospectus:

Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed on March 31, 2010;

Edgar Filing: SMARTHEAT INC. - Form 424B3

Quarterly Reports on Form 10-Q for the fiscal quarter ended March 31, 2010, filed on May 11, 2010, and for the fiscal quarter ended June 30, 2010, filed on August 11, 2010; and
Current Reports on Form 8-K, filed on February 4, 2010, March 31, 2010, May 11, 2010, May 26, 2010, and August 12, 2010; and

The description of our Common Stock set forth in our Registration Statement on Form 8-A (Registration No. 001-3426) filed with the SEC on January 27, 2009, including any amendments thereto or reports filed for the purpose of updating such description.

Notwithstanding the foregoing, information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits, is not incorporated by reference in this prospectus.

TABLE OF CONTENTS

All documents subsequently filed with the Securities and Exchange Commission by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, after the date of the initial registration statement (other than current reports or portions thereof furnished under Items 2.02 or 7.01 of Form 8-K), prior to the termination of this offering, shall be deemed to be incorporated by reference herein and to be part of this prospectus from the respective dates of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof or of the related prospectus supplement to the extent that a statement in any other subsequently filed document which is also incorporated or deemed to be incorporated herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES LAW VIOLATIONS

Under Sections 78.7502 and 78.751 of the Nevada Revised Statutes, the Company has broad powers to indemnify and insure its directors and officers against liabilities they may incur in their capacities as such. The Company's By-laws implement the indemnification and insurance provisions permitted by Chapter 78 of the Nevada Revised Statutes by providing that:

The Company shall indemnify all its directors and officers to the fullest extent permitted by Chapter 78 of the Nevada Revised Statutes or any other law then in effect or as it may hereafter be amended. The Company shall indemnify each of its present and future directors and officers who becomes a party or is threatened to be made a party to any suit or proceeding, against expenses, including, but not limited to, attorneys' fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit, proceeding or settlement, provided such person acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interest of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

The expenses of directors and officers incurred in defending a civil or criminal action, suit, or proceeding may be paid by the Company as they are incurred and in advance of the final disposition of the foregoing actions, if such person undertakes to repay said expenses if it is ultimately determined by a court that he is not entitled to be indemnified by the Company, meaning, a final adjudication establishes that the person's acts or omissions involved a breach of any fiduciary duties, where applicable, intentional misconduct, fraud or a knowing violation of the law which was material to the cause of action.

These indemnification provisions may be sufficiently broad to permit indemnification of the Company's directors and officers for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or controlling persons pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

TABLE OF CONTENTS

5,000,000 Shares
SMARTHEAT INC.
Common Stock

Prospectus Supplement
November 18, 2010

Barclays Capital

Oppenheimer & Co.
