Zacks Equity Research

April 25, 2011
Steven Ralston, CFA

www.zacks.com 111 North Canal Street, Chicago, IL 60606

SunSi Energies, Inc. (SSIE-OTCQB)

SSIE: Zacks Company Report – NEUTRAL

Current Recommendation	**Neutral**
Prior Recommendation	N/A
Date of Last Change	04/24/2011
Current Price (04/22/11)	$3.00
Six- Month Target Price	**$3.25**

OUTLOOK

SunSi Energies is positioned to benefit from the growth of the solar energy industry, specifically through trichlorosilane (TCS), a critical feedstock for the manufacture of solar-grade polysilicon. The company has completed two acquisitions and is pursuing others. Management's objective is to assemble a portfolio of trichlorosilane production facilities and distribution companies in China, with the goal of becoming the dominate trichlorosilane company in that country. We initiate coverage of SunSi Energies with a Neutral rating and a price target of $3.25.

SUMMARY DATA

52-Week High	**$4.00**
52-Week Low	**$0.86**
One-Year Return (%)	**0.00**
Beta	**N/A**
Average Daily Volume (shrs.)	**472**
Shares Outstanding (million)	**27.7**
Market Capitalization ($ mil.)	**$85.9**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**N/A**
Insider Ownership (%)	**32.5**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2011 Estimate	**N/M**
P/E using 2012 Estimate	**23.1**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small - Value**
Industry	**Chemical – Solar**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Aug)	Q2 (Nov)	Q3 (Feb)	Q4 (May)	Year (May)
2009	0.00 A	0.00 A	0.00 A	0.00 A	0.00 A
2010	0.00 A	0.00 A	0.00 A	0.00 A	0.00 A
2011	0.00 A	0.00 A	4.62 A	12.00 E	16.66 E
2012					48.00 E

Earnings per Share
(EPS is operating earnings before non recurring items)

	Q1 (Aug)	Q2 (Nov)	Q3 (Feb)	Q4 (May)	Year (May)
2009	-$0.00 A	-$0.00 A	-$0.00 A	-$0.00 A	-$0.01 A
2010	-$0.01 A	-$0.01 A	-$0.00 A	-$0.00 E	-$0.02 A
2011	-$0.01 A	-$0.01 A	-$0.00 A	$0.02 E	$0.01 E
2012					$0.13 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/M**

2009 and 2011 quarterly EPS do not equal annual EPS due to rounding.

© Copyright 2011, Zacks Investment Research. All Rights Reserved.

KEY POINTS

- SunSi's management team sought out the optimal investment opportunity in the growing solar industry. Management's objective is to become the largest trichlorosilane (TCS) producer in China through the acquisition, development and operation of a portfolio of trichlorosilane production facilities in that country.
- Management has aggressively, but with the appropriate due diligence, completed two acquisitions (**Wendeng** and **Baokai**), and is pursuing others, along with increasing the capacity at Wendeng by 240% to 75,000 metric tons of TCS.
- SunSi is the only US publicly traded company to solely focus on the production of trichlorosilane, primarily for the solar industry. As such, the company is positioned to benefit from the growth of the solar energy industry, specifically the increasing demand for solar-grade polysilicon.
- One of management's stated goals is to attain AMEX listing, which management expects to attain once the company has over 400 stockholders[1].
- We initiate coverage of SunSi Energies with a Neutral rating and a price target of $3.25, which is based on a 2.15 price-to-sales valuation, the average of the expected range. When the financing of the Wendeng transaction has been completed, the price target will be re-evaluated.

OVERVIEW

A Nevada corporation with administrative offices in Brooklyn, NY, SunSi Energies (SSIE: OTCQB) focuses exclusively on the production and sales of trichlorosilane (TCS), the basic chemical ingredient used in the production of purified polysilicon[2], an essential raw material in the production of solar cells for photovoltaic (PV) panels. Having evaluated the value chain related to the production of photovoltaic solar cells, management believes that the highest profit and growth potential lies in the production of TCS. Therefore, management's objective is to acquire, develop and operate a portfolio of TCS facilities, which (with subsequent capacity expansions) will increase the company's total annual capacity to 140,000 metric tons (MT) by the end of fiscal 2012. Between December 2010 and March 2011, the company acquired majority ownership positions in two Chinese companies (60% of the **Wendeng** trichlorosilane production facility and 90% the Zibo **Baokai** trichlorosilane distribution company), which together control TCS production of approximately 47,000 MT. With the acquisition of 90% of the Zibo Baokai distribution company, SunSi began to report revenue on a consolidated basis in the most recent quarter, the third fiscal quarter ending February 28, 2011.

The company was incorporated in Nevada in January 2007 as a gold exploration company[3], but subsequently was restructured on March 24, 2009 and renamed SunSi Energies, Inc under a completely new management team. The focus of the company's business strategy became the acquisition, development and operation of trichlorosilane production facilities in China in order to serve the growing requirements of the solar photovoltaic industry worldwide. SunSi Energies owns 100% of a Hong Kong-based company, SunSi Energies Hong Kong Limited[4], through which SunSi Energies is acquiring the control of Chinese TCS production and distribution facilities.

[1] In the 10-K filed with the data as of May 31, 2010, the company had 45 shareholders of record.

[2] Properly known as polycrystalline silicon.

[3] Initially, the company was incorporated as Bold View Resources to explore Cupro mineral claims in the Province of British Columbia.

[4] Located at 401 Jardine House, 1 Connaught Place, Central, Hong Kong.

THE SOLAR ENERGY INDUSTRY AND MANAGEMENT'S STRATEGY

The clean and renewable alternative energy market is growing today due worldwide concerns over the environmental impact of the continued use of fossil-based fuels, along with the dependence on nuclear energy. In addition to individual moral motives, government subsidies are supporting the growth of alternative renewable energy installations, including those for the generation of photovoltaic solar energy. **The nascent motive of SunSi's management is to optimally participate in the growth of the solar energy industry.**

A combination of global governmental incentives is expected to drive increased demand for solar energy-related equipment and components, including solar-grade polysilicon. In the United States, the federal government and various state governments have incentive programs to financially encourage electricity production from renewable energy sources, including solar. Federal incentive programs include federal grant programs and corporate tax credits, while state incentive programs include tax exemptions and credits as well as feed-in tariff programs, where utilities are required to buy all the electricity generated from renewable sources at rates higher than those for conventional power.

The American Recovery and Reinvestment Act of 2009 (ARRA) awarded $16.8 billion to the Office of Energy Efficiency for its programs and initiatives and up to $2.3 billion to the Department of Treasury for Advanced Energy Manufacturing Tax Credits. In addition, the ARRA provides for Renewable Energy Grants, a Renewable Energy Loan Guarantee Program[5] and $5.5 billion for the construction, repair and alterations of federal buildings to increase energy efficiency, including the installation of solar energy systems. In 2010, 0.956 gigawatts[6] of solar electric capacity (comprised of 878 megawatts of photovoltaic systems and 78 megawatts of solar thermal power projects were installed in the US at a cost of $6 billion. In 2009, 441 megawatts of solar capacity was added. Total US installed capacity is now 2.6 gigawatts.

Also, in Europe feed-in tariff programs have been implemented, specifically in Germany, Spain, France and the UK. Germany is in the forefront. After installing 3.9 gigawatts in 2009, 7.4 gigawatts of photovoltaic systems were installed in 2010, bringing total installed capacity in Germany up to 17.3 gigawatts[7]. On sunny days in 2011, German solar power production should satisfy 20% of demand, leading the world in solar capacity. The top three countries in Europe (Germany, Italy and the Czech Republic) collectively installed 12.9 gigawatts of solar capacity in 2010.

In March 2011, China's 12th Five-Year Plan for economic development was passed by the National People's Congress. The Peking government continues in its efforts to reduce carbon intensity by 17%, through increased non-fossil fuel energy use, better energy consumption, reduced carbon emissions, increased forest coverage and reduced industrial water usage. Though it is estimated that approximately RMB[8] 3.0 trillion ($US 460 billion) will be invested in clean energy and environmental protection, most will be spent on the clean non-fossil fuel energy categories of nuclear plants and hydropower stations. However, as part of the plan, over the next three years, it is expected that China will expand total installed solar capacity from 0.63 gigawatts in 2010 to 5.0 gigawatts by 2015. In 2008, China's solar capacity was only 0.10 gigawatts.

A report compiled by a trade group of over 20 renewable energy associations around the world estimates that by 2020, global solar energy capacity may reach 980 gigawatts[9] as governments worldwide seek to

[5] The Renewable Energy Loan Guarantee Program establishes a temporary DOE loan guarantee program for renewable energy projects through the appropriation of $6 billion to pay the credit subsidy costs, which should support $60 billion worth of loan guarantees.

[6] Report released by the Solar Energy Industries Association (SEIA) on March 10, 2011.

[7] The annual statistical report of the Renewable Energies Act reported by The Federal Network Agency on March 21, 2011.

[8] Chinese Yuan.

[9] Bloomberg Business week, Christopher Martin, Global Solar Energy May Reach 980 Gigawatts by 2020, December 2, 2010.

reduce fossil fuel consumption and cut emissions of greenhouse gases. The report predicts that US solar capacity may rise to 139 gigawatts and will account for 5% of total domestic energy demand.

In 2010 global solar photovoltaic installations increased 143% to 18.2 gigawatts from 7.5 gigawatts in 2009[10]. Germany is the leader in both total installed solar energy capacity (17.3 gigawatts) and the installations of new solar systems in the most recent year (7.4 gigawatts in 2010). In 2010, the global solar photovoltaic industry generated revenues of $82 billion[11], up 105% from $40 billion in 2009. Worldwide solar cell production was 20.5 gigawatts in 2010, up 108% from 9.86 gigawatts in 2009. Over 80% of global installation demand came from the top five countries: Germany, Italy, Czech Republic, Japan and the United States. The three leading countries of solar photovoltaic installed capacity are Germany, Japan and the US, representing almost 89% of the global total.

China is the world leader in solar cell production with about 53% of the market. China and Taiwan together accounted for 59% of global solar cell production in 2010, up 49% from the prior year. Within the 12th Five-Year Plan, China expects to maintain its position as the global leader in solar cell manufacturing. Suntech Power (STP: NYSE) founded in Wuxi, China in 2001 and JA Solar (JASO: NASDAQ) headquartered in Shanghai, China are the leading manufacturers of solar cells and panels. Chinese solar cell firms are low-cost producers, primarily due to the low-cost labor and low-cost feedstocks. China-based LDK Solar (LDK: NYSE) is the world's largest producer of solar wafers in terms of capacity, and Jiashan-headquartered ReneSola (SOL: NYSE) manufactures solar wafers and modules for companies such as JA Solar, Motech Industries, Solarfun Power and Suntech Power. In addition, Yingli Green Energy (YGE: NTSE), headquartered in Baoding, China, manufactures and sells photovoltaic modules into the Germany, Spain, Italy, Greece, France, South Korea and the US markets.

SunSi's initial management team, Michel Laporte and Richard St-Julien, sought out the optimal investment opportunity in the growing solar industry. Evaluating the entire production supply chain in terms of value (from sand, the raw source of silicon, to complete solar systems), management determined that the highest profit potential lay in **the production of trichlorosilane**, an important intermediate chemical critical for the production of polysilicon, a key component for the manufacture of polycrystalline silicon solar cells that are used in photovoltaic modules. Furthermore, **China was targeted due its global low-cost position.**



Therefore, **management's objective became the acquisition, development and operation of a portfolio of trichlorosilane production facilities in China, with the goal of becoming the largest TCS producer in that country**[12]. In addition, only strategically-located facilities that can globally deliver high quality, solar-grade trichlorosilane are being targeted, with scalable facilities being preferred for future potential expansion. With two acquisitions already having been announced, management continues to evaluate additional acquisition opportunities in China. Not only does management expect to benefit from supplying the Chinese and Asian, but also the North American and European polysilicon solar markets.

---

[10] Solar installations were 2.826 gigawatts in 2007 and 5.95 gigawatts in 2008.

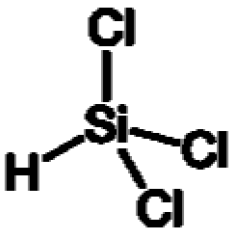
[11] Reported by Solarbuzz, the solar energy market research subsidiary of The NPD Group, on March 15, 2010.

[12] Due to the unique nuances of ownership in the Peoples Republic of China (PCR), SunSi is also pursuing the control or distribution rights of trichlorosilane production in China.

PRODUCT - TRICHLOROSILANE

Trichlorosilane ($SiHCl_3$) is an important intermediate or feedstock chemical used in the production of solar cells for photovoltaic panels. The most widely used methodology of manufacturing solar cells (over 75%) today utilizes polycrystalline silicon produced through the Siemens process, during which high-purity silicon rods are exposed to trichlorosilane at 1,100 to 1,200 °C. The trichlorosilane gas decomposes and forms ultra-pure silicon crystals, also know as polysilicon or poly-Si. The basic reaction is the catalytic decomposition of trichlorosilane with hydrogen (HSiCl3 + H2 -> Si + HCl). Hence, trichlorosilane is an important feedstock used in a critical step of the Siemens process to produce ultra-pure polysilicon. The other methods of manufacturing solar cells use either monocrystalline or thin-film silicon, to which SunSi does not have exposure.

Trichlorosilane is a chemical compound composed of silicon, hydrogen and chlorine. It is a colorless, toxic, flammable and corrosive liquid. TCS must be handled with extreme caution since it reacts explosively with water yielding hydrochloric acid and a white residue of silica (SiO_2). Trichlorosilane also can react with moisture in the air. With a boiling point of 31.8 °C, TCS must be carefully distilled to an ultra-pure form (99.999% pure) in order to be used in the Siemens process. Ultrapure trichlorosilane is liquid at normal temperature and pressure, but usually is shipped under varying nitrogen pressures between 5 and 20 psig (pound-force per square inch gauge.



$SiHCl_3$



Tank Truck at ZBC facility

Trichlorosilane is available in different grades, with ultra-pure trichlorosilane being required to produce solar-grade polysilicon of 99.9999% purity (six nine or 6/9 or 6N). In this highly-strict purity requirement, the content of the boron, phosphorus elements must be less than 10 ppb (parts per billion), polymers less than 10 ppm, metal elements (such as iron, arsenic, magnesium, aluminum, nickel, chromium, copper, zinc and lead) less than 1 ppb, with the total content of metal elements being less than 10 ppb. The purity of electronics grade polysilicon is even higher with silicon semiconductor devices requiring exceptionally high purity polysilicon of not less than 11/9 (eleven nine or 11N), which is 99.999999999% pure. SunSi is targeting the solar cell market, though approximately 5% of the company's revenues are from companies in the semiconductor industry.

Trichlorosilane is produced by blowing hydrogen chloride through a bed of at least 97% pure silicon powder, aka metallurgical grade silicon[13] (MGS), at reasonably low temperatures (200 °C - 400 °C), where the two combine to produce trichlorosilane and hydrogen according to the chemical equation:

$$Si + 3\ HCl \rightarrow SiHCl_3 + H2$$

[13] MGS is obtained by heating grains of relatively pure silicon dioxide (sand or quartz) with carbon at very high temperature (over 1,900 °C or 3,450 °F).

To achieve high quality trichlorosilane at a purity level suitable for solar applications, a multiple distillation process of liquefied trichlorosilane reduces the impurities to acceptable levels. Since TCS is liquid at room temperature, purification can be accomplished using standard distillation techniques.

Due to the toxic nature of trichlorosilane[14], becoming a manufacturer of TCS requires not only a significant capital investment, but also construction permits, along with regulatory and environmental permitting and often governmental approvals, which may also include zoning permits. Specifically in China, for safety reasons or to mitigate environment pollution, the provincial and local governments could impose conditions or restrictions, or require testing protocols to obtain the required permits. In addition, operating and work safety permits are necessary, but usually can be obtained as a trichlorosilane facility is being constructed. Considering these major barriers to entry of becoming a trichlorosilane producer (large capital investment, several years of planning and construction and special permitting), TCS production tends to achieve higher profit margins than other segments in the solar industry value chain.

A BRIEF PRIMER ON SILICON SOLAR CELL TECHNOLOGIES

Solar power from photovoltaic cells represents an important source for renewable energy. Solar cells convert light energy into electrical energy through the photovoltaic effect, by which light particles (photons) produce an electrical current when they strike the surface of a semiconductor. Over 80% of the solar cells manufactured today use silicon as the semiconductor material. Solar cells are combined into modules that compose the panels in the arrays of a photovoltaic system.

Simplistically, there are three basic types of silicon solar cells: monocrystalline, polycrystalline and amorphous. Though monocrystalline solar cells are the most efficient, they also are the most expensive to manufacture since the production of monocrystalline silicon requires a complicated crystal growth process, usually employing the Czochralski (CZ) method. The level of a solar cell's efficiency specifies the percentage of radiated light energy is converted into useable electricity. The highest efficiency of a monocrystalline silicon solar cell is around 24% in the laboratory, but production cells range between 14% and 18%. In 2010, 34% of silicon-based solar cells were made with monocrystalline silicon. Polycrystalline or multi-crystalline cells are less efficient (13% to 15%) and less expensive. Polycrystalline solar cells have maintained a market share above 50% since 2002. Amorphous solar cells are manufactured through the deposition of very thin layers of silicon on a base material or substrate employing thin-film technology. The production costs of amorphous solar cells is lower than polycrystalline cells, but the energy efficiency of thin-film cells is also less, in the 5% to 8% range. Hence, thin-film solar cells require more square footage of surface area to produce the same amount of electrical power as monocrystalline or polycrystalline solar cells. Thin-film silicon technology accounted for 13.5% of total silicon-based solar cell production in 2010.

SunSi is positioned to take advantage of the current and future growth of the solar industry worldwide by targeting trichlorosilane, the feedstock chemical used in a critical step of the Siemens process to produce ultra-pure polysilicon, which is used in all three basic types of silicon solar cells. Therefore, trichlorosilane is used in over 80% of all the solar cells manufactured, with the remaining solar cells using other silicon purifying procedures or utilizing other semiconductor materials, such as cadmium telluride (CdTe), copper indium gallium selenide (CIGS) and gallium arsenide (GaAs).

[14] OSHA considers trichlorosilane to be hazardous under the OSHA Hazard Communications Standard (29 CFR 1910.1200).

DEMAND AND COMPETITION

SunSi's management is striving to become a world leader in the production of trichlorosilane. Having targeted China as the low-cost producing area, over the intermediate-term, the company directly competes with the trichlorosilane plants in China, where the number and capacity of TCS producers has grown over the last few years in order to supply local polysilicon manufacturers.

China's polysilicon production capacity has developed rapidly from 100 tons in 2004 to 50,000 tons in 2010[15]; however, 2010 output was only in the 30,000 to 40,000 ton range[16], as small-scale production facilities with short production runs, coupled with product quality problems and high input costs hampered capacity utilization. The Chinese government has addressed quality/cost issues with mandates for minimum production capacity, rigid guidelines on energy consumption, environment protection requirements and required minimum recycling rates[17]. With domestic Chinese demand of approximately 80,000 tons, imported polysilicon, predominately from the US, South Korea and Germany, filled the gap. Despite polysilicon production in China having expanded in recent years, demand from domestic manufacturers exceeds domestic supply. The need for further increased production of polysilicon within China for current domestic demands, especially from solar cell manufacturers, is a key motivator for additional Chinese polysilicon capacity.

The dramatic overall increase of global trade with China is a catalyst for incremental international demand for Chinese solar cells and modules. In late 2001, China entered the World Trade Organization (WTO), having agreed to open and liberalize access to its internal markets for goods and services in accordance with WTO rules. By becoming a more predictable environment for trade and foreign investment, China has better integrated into the world economy, especially by attracting investments to export-oriented manufacturing like solar cell production. The resulting trade and structural reforms have made China the world's third largest trader. Though barriers to trade and investment have declined considerably, Peking continues to intervene at times in order to manage trade for domestic supply reasons. However, China continues to improve the transparency of its trade and investment practices, thereby reducing barriers to trade, especially concerning customs procedures, technical standards, export constraints and foreign investment restrictions.

The significant expansion of the solar energy market through active promotion and development of photovoltaic energy in Germany, Japan, US, Spain, Italy, Australia and other developed countries is stimulating demand for additional solar-grade polysilicon. Also, solar energy has been identified as one of China's strategic emerging industries by the central government. Polysilicon capacity continues to increase in China, for example in February 2011, GCL-Poly Energy Holdings announced a HK$17.7 billion ($2.3 billion) expansion of its polysilicon and wafer facilities in China. Close by in Yeosu, South Korea, Hanwha Chemical announced in April 2011 that it plans to spend 1.04 trillion won ($955 million) on a polysilicon plant, which will be able to produce 10,000 metric tons of polysilicon annually.

Most of China's polysilicon production utilizes the Siemens process, with trichlorosilane being an important feedstock; therefore, the trichlorosilane industry in China has grown considerably over the last few years. An important aspect of the solar industry value chain is that the quantity of trichlorosilane needed to produce polysilicon is a ratio of 6.25 to 1. Hence, 6.25 MT of trichlorosilane is required to produce 1 MT of polysilicon. In 2004, there were only 4 producers of trichlorosilane in China with total annual production capacity of 4,280 MT, which has risen to 500,000 MT from over 30 producers in 2010.

[15] China Research and Intelligence: Research Report on China Polysilicon Industry, 2011-2012.

[16] Estimates vary according to the source.

[17] On February 28, 2011, Shanghai Lengguang Industrial announced it will terminate production of polysilicon citing government policies as a primary reason.

However, local demand increased more than capacity, driving the price of trichlorosilane upwards from $1,000 per metric ton in 2009 to approximately $1,600 currently.

Year	# of producers in China	Capacity (MT)	Price Range
2004	4	4,280	N/A
2005	14	22,000	N/A
2006	16	30,000	N/A
2009	20	80,000	$1,000 - $1,100
2010	25	300,000	$1,100 - $1,450
2011 E	30+	500,000	$1,450 - $1,700

Most of China's trichlorosilane producers are located in Jiangxi province, Tangshan (Hebei province), Zibo (Shandong), Chongqing (Sichuan), Wuhan (Hubei), and Shanghai. The top major producers in China are in the table below.

Producer	Province	Capacity (MT)
The PVC Company Ltd. of Shandong Xinlong Group	Shandong	60,000[18]
Zibo Baoyun Chemical Plant	Shandong	25,000
Leshan Yongxiang Resins Co., Ltd.	Sichuan	25,000
Wendeng He Xie Silicon Co. Ltd.	Shandong	22,000
Tangshan Sunfar Silicon Industries Co., Ltd.	Hubei	20,000
Huaxiang Chemical Industry Co., Ltd.	Hubei	15,000
Kaihua Synthetic Material Co., Ltd.	Zhejiang	10,000
Qianjiang Tianxiang Chemical Co., Ltd.[19]	Hubei	10,000
Sichuan Yongxiang Co., Ltd. [20]	Sichuan	5,000

Over the long-term, SunSi will be in competition with all producers of TCS on a global basis, which will be dependent on global demand and transportation costs. Even though very little trichlorosilane is exported from China currently, SunSi's management has identified several potential foreign buyers of low-cost Chinese TCS, which may allow SunSi to diversify its customer base as well as realize higher margins. With the ports of Weihai and Qingdao close to both of the company's facilities, management is targeting potential customers in Asia, the United States and Europe.

[18] The PVC Company Ltd. advertises its capacity as 60,000 MT, but both the analyst and SunSi's management doubt the veracity of the claim.

[19] Aka Jiangzuan Tianxiang Chemical Co., Ltd. and formerly Wuhan Tianxiang Chemical Company.

[20] Joint venture establishment of Tongwei Group and Giant Star Group.

Globally, the largest producers of trichlorosilane are Wacker Chemie AG (Germany), Dow Corning (USA), Tokuyama Corp. (Japan), Mitsubishi Materials (Japan), Osaka Titanium (Japan), Siliken Chemicals (Spain), Chemos GmbH (Germany) and Praxair (USA). These manufacturers of trichlorosilane supply the major international producers of polysilicon, some of which are internal to their respective companies: Hemlock (a joint venture of Dow Corning, Shin-Etsu Handotai and Mitsubishi Materials), Wacker Chemie AG, Renewable Energy Corp. aka REC ASA (Norway), MEMC Electronic Materials (USA), Tokuyama Corp., Mitsubishi Materials, Osaka Titanium, Sumitomo Titanium (Japan) and the OCI Company of South Korea with a combined annual capacity of over 145,200 tons.

PRODUCTION FACILITIES

Wendeng He Xie Silicon Company Ltd.

Wendeng He Xie Silicon Company Ltd. (**Wendeng**) is a trichlorosilane production company located in Shandong province of China in Weihai City. Shandong is one of the top manufacturing provinces in China and the third most populous with a population of approximately 92 million. The province has benefited from Japanese and South Korean investments due to its geographical proximity to those countries. The Shandong Peninsula is the most developed part of Shandong province.



Peoples Republic of China (PRC)



Shandong Province

Wendeng commenced trichlorosilane production in 2009. The facility is easily accessible by rail and major highways, along with being close to major ports on the Yellow Sea in eastern China, including Weihai[21] on the north coast and Qingdao (also spelled Tsingtao) on the south coast of Shandong Peninsula. Strategically located, the PCS produced at Wendeng can be transported without difficulty to meet demand both within China and overseas. The scalable facility is capable of fulfilling management's vision of becoming the largest single site producer of trichlorosilane in China.

SunSi Energies acquired 60% of the He Xie Silicon Company Ltd. in March 2011. Under the terms of the agreement, SunSi will pay the sole shareholder of Wendeng, Liu Dongqiang (a Chinese individual), $445,075 by June 7, 2011 and 1,349,628 common shares[22] of SunSi Energies, which carry a right of

[21] Between 1898 and 1930, Weihai was a British colony sometimes referred to as Port Edward.

[22] The shares of common stock issued by SunSi are exempt from registration, since the securities were issued to a non-US person and are exempt from registration under Regulation S of the Securities Act of 1933, as amended.

redemption by Mr. Liu within six months for RMB 18,000,000 (approximately $2.7 million). Also, an existing shareholder of SunSi will contribute 1,574,566 shares[23] of SunSi common stock to Liu Dongqiang. As part of the transaction, Liu Dongqiang will contribute to future expansion costs in order to maintain his equity interest at 40%.

The process to acquire the He Xie Silicon trichlorosilane production company required many months of effort. A letter of intent was signed in August 2010, after which SunSi conducted its legal and financial due diligence. Richard St-Julien (Chief Legal Officer, member of the Board of Directors and President of SunSi Energies' Hong Kong Limited subsidiary) was instrumental in closing the transaction with monthly trips to China. The strategic support from the local and provincial Chinese governments was required.

Wendeng He Xie Silicon Company is recognized in China for the production of high quality TCS. Wendeng facility efficiently produces high purity trichlorosilane, primarily due to its relatively recent construction, its design and its management team. The Chief of Technology of the He Xie Silicon facility is Zhang Fahe, who designed the plant and has over 30 years of experience in the Chinese chemical industry, the last ten years specializing in trichlorosilane. In August 2010, he was appointed as Director of Technology for SunSi in China. Since 2001, Zhang Fahe has developed and implemented advanced TCS production technologies by which key TCS production technological processes have been optimized at the Wendeng plant. For his accomplishments, he has received multiple technology progress awards from the provincial and regional scientific committees.

With the acquisition of 60% of the He Xie Silicon facility, SunSi has retained the entire management team and all of its employees. Liu Dongqiang, the 40% minority shareholder, continues to provide his trichlorosilane technology experience, technical assistance and construction expertise for the facility's continued operation and planned capacity expansion, having been appointed manager of the facility.

During the last fiscal year ending May 31, 2010, the Wendeng facility generated $12.0 million in revenues and $1.9 million in pre-tax operating profit. For the fiscal year ending May 31, 2011, management expects revenues to increase 67% to 108% to between $20.0 and $25.0 million due to higher trichlorosilane prices and increased demand. Wendeng's customer base includes some of the largest polysilicon producers in China; however, most of its current production is sold to Luo Yang Zhong Silicon Hi-tech Technology Development Co. Ltd (a subsidiary of China Silicon Corporation), Jiangsu Zhong Neng Silicon Industry Technology Development Co. Ltd (a subsidiary of GCL Solar Energy[24]) and LDK Solar Company Ltd.



He Xie Silicon facility (water cooling process)



He Xie Silicon facility (storage tanks)

[23] The 1,574,566 shares are restricted from resale for 2.5 years.

[24] GCL Solar Energy is a subsidiary of a subsidiary of GCL-Poly Energy Holdings Ltd.

Currently, Wendeng is operating at full capacity, estimated to be 22,000 MT. Based on strong worldwide demand for trichlorosilane, SunSi is expanding the capacity of the Wendeng facility. The initial expansion phase is expected to increase capacity to 30,000 metric tons, which is expected to be completed before the end of April 2011. An ensuing second expansion program is planned to begin in May 2011, and bring Wendeng's capacity to 75,000 MT by the end of 2011.

Zibo Baokai Commerce and Trade Company

Zibo Baokai Commerce and Trade Company[25] (**Baokai**) is a trichlorosilane distribution company located in the prefecture-level city of Zibo in central Shandong province. Baokai owns the exclusive worldwide distribution rights over all trichlorosilane produced by the Zibo Baoyun Chemical plant (ZBC), which sells its entire TCS production (currently approximately 25,000 metric tons of trichlorosilane annually) to Baokai, which, in turn, resells it at a price determined by Baokai.

SunSi Energies, through its SunSi Energies Hong Kong Limited subsidiary, acquired 90% of Zibo Baokai Commerce and Trade Company on December 8, 2010. Not only is the acquisition process in China time-consuming, but also the important aspects of the details of the transaction resulted in a protracted timeline. SunSi's management diligently consummated the acquisition, having performed its due diligence on both the Baokai and ZBC[26], and on the nuances of ownership and acquisition procedures in China.

At first, management desired to purchase the Zibo Baoyun Chemical plant; however, due to the unique property ownership rules in China, the ownership of ZBC cannot be transferred to a third party in the event of takeover of SunSi, since the land upon which ZBC is situated is owned by the village of Shangzhuang. Realizing that it was not in the best interests of SunSi's shareholders to acquire ZBC with this restriction, management pursued the control of ZBC's production by acquiring Zibo Baokai Commerce and Trade Company, the owner of the exclusive distribution rights within China of ZBC's production. However, in February 2010 prior to acquiring Baokai, SunSi secured 90% of Zibo Baokai Trade Company, the distribution company with the exclusive international TCS distribution rights of Zibo Baokai Commerce and Trade Company. Therefore, upon the closing of the Baokai acquisition, SunSi owns the global distribution rights for 100% of ZBC's trichlorosilane production.

The Zibo Baoyun Chemical plant is located in the Shandong province in the city of Zibo, approximately 50 miles east of Jinan (see map above). Founded in 2000 as company focused on organic silicon products, the company obtained a license to produce trichlorosilane in 2003. A new facility was constructed on a 24-acre property that is accessible via rail and major highways. ZBC began TCS operations in 2005. ZBC produced over 500 MT of trichlorosilane in 2006 and 2,000 MT the following year. From late 2007 to late 2008, the production facility was expanded, increasing production to 6,000 MT. Currently, ZBC's trichlorosilane capacity is 25,000 MT per year. In addition, the same location annually produces 1,000 MT of Silicon Tetrachloride[27], 2,000 MT of Phosphorous Trichloride[28] and 1,000 MT of Phosphorous Oxychloride[29]. Management expects Baokai to generate monthly revenues between $1.5 million and $2.0 million. ZBC is ISO9001 certified and employs over 150 people.

[25] Baokai's legal address is at Shangzhuang Village, Sibaoshan Sub-District Office, Hi-Tech Zone, Zibo City, People's Republic of China (PRC).

[26] SunSi prepared GAAP audited historical financial statements for ZBC when the company was initially pursuing the direct acquisition of ZBC.

[27] Silicon Tetrachloride is used in the production of organic silicon compounds, organic silicon oil, silicon rubber, heat-resistant cushions, extremely pure silicon, polysilicon, highly pure silicon dichloride, inorganic silicon compounds and quartz fibers.

[28] Phosphorous Trichloride is used in the production of dipterex, dichlorovos, Methamidophos, sulfadiazine, sulfamethoxydiazine and fragrances.

[29] Phosphorous Oxychloride is used in the production of sulfur pesticides, sulfamethoxypyridazine, dye intermediates and reagents.



Zibo Baoyun Chemical plant (trichlorosilane facilities)



Zibo Baoyun Chemical plant (water cooling process)

Zibo Baokai Commerce and Trade Company transports finished chemical products from the Zibo Baoyun Chemical plant to customers across China. The special permits and licenses by Chinese authorities and held by Baokai to transport dangerous goods within China are important intangible assets of the trucking company.

Management's objective is to acquire, develop and operate a portfolio of TCS facilities with a total annual capacity to 140,000 metric tons by the end of fiscal 2012. Through the acquisition of 60% of Wendeng He Xie Silicon Company and 90% of Zibo Baokai Commerce and Trade Company, SunSi Energies controls 47,000 MT of trichlorosilane production. Capacity additions of 55,000 MT are planned to bring the company's total capacity to over 100,000 MT by the end of fiscal 2011. Management plans to build or acquire at least 80% ownership in an additional 40,000 MT of capacity during fiscal 2012, bring the amount of total production controlled to 140,000 MT.

FINANCIAL HISTORY

SunSi's predecessor company, Bold View Resources, was a gold exploration company, with clean financials, having issued 2.23 million shares for $38,000 and investing $56,389 in exploration activities. SunSi Energies commenced operations on March 24, 2009 with Michel Laporte and Richard St-Julien, who began to focus the company on the solar photovoltaic industry through the trichlorosilane market. Late in fiscal 2009, a 12-1 split increased the shares outstanding to 26.76 million shares. During in fiscal 2010, 562,500 shares[30] were issued at $2.00 per share for net proceeds of $994,500, which helped fund the implementation of management's business plan, along with the attendant due diligence. Subsequently during the first three quarters of fiscal 2011, the company has been conducting a private placement of a maximum 8,000,000 shares and has issued an additional 431,000 shares for net proceeds of $775,800, which is earmarked for the funding of the Baokai and Wendeng acquisitions. Baokai requires a payment of $273,910 while Wendeng calls for a payment of $445,075 by June 7, 2011. Management must also be able to meet potentially the $2.7 million redemption by Mr. Liu (the seller of 60% of Wendeng to SunSi) for 1,349,628 shares of SunSi Energies at $2 per share on September 7, 2011 or negotiate deferred payment terms. Management hopes to raise $6 million in equity capital: $3.5 million for acquisition of Wendeng, $1.5 further due diligence for additional TSC facilities, and $1.0 for working capital.

[30] Shares were issued in September and October 2009 and in February, March and May 2010. The cost of issuance totaled $110,500

© Copyright 2011, Zacks Investment Research. All Rights Reserved.

SunSi Energies is authorized to issue 75 million shares of common stock at a par value of $0.001 and had 27,743,500 shares of common stock issued and outstanding as of February 28, 2011. However, in March 2011, the company filed to augment its authorized capital stock with 25,000,000 shares of "blank check" preferred stock[31]. SunSi Energies has also entered into various engagement agreements for advisory and consulting services to obtain equity capital. If unable to raise sufficient equity capital, management is prepared to secure debt financing.

Management has been fiscally responsible during the due diligence phase of targeting trichlorosilane acquisitions. The Directors have not been paid any monetary or stock compensation, and the executive officers have only been compensated with existing stock and options with lockup provisions, with the exceptions of the David Natan, (initially Chief Financial Officer and now Chief Executive Officer) and Yifeng Song (Director of Business Development), both of whom receive only $60,000 per year plus business expenses. The corporate burn rate (excluding non-recurring due diligence expenses) of SunSi Energies is between $400,000 and $500,000 annually.

At the end of the third fiscal quarter of 2011 (February 28, 2011), SunSi Energies had $448,995 in cash, no long-term debt and $464,068 in shareholders' equity.

RECENT NEWS

On April 18, 2011, SunSi Energies reported fiscal third quarter results for the period ending February 28, 2011. For the first time, SunSi Energies reported revenue as a result of the acquisition of 90% of Zibo Baokai Commerce and Trade Company in December. Revenue for the third fiscal quarter was $4.6 million and gross profit was $93,968. The gross margin was 2.0%. The company continues to conduct due diligence for the acquisition of additional TCS production, resulting in professional fees of $75,533 in the quarter. The addition of three employees increased general and administrative expenses by 194% to $122,053. For the quarter, the company reported a loss of $134,159 or $0.00 per diluted share.

During the third fiscal quarter, the company raised $319,500 through private placements of stock, bringing the total of net proceeds to $775,800 for the first three quarters of fiscal 2011.

Concurrent with the earnings release, management issued guidance for the fourth fiscal quarter. Revenues are expected to be in the $11 million to $13 million range due to the inclusion of the operations from its 60% equity interest in Wendeng He Xie Silicon Company, which will be in addition to the revenue from the Zibo Baokai Commerce and Trade Company acquisition that began to be reported the third fiscal quarter. Earnings per share for the fourth fiscal quarter are expected to be in the $0.01 to $0.02 range.

On March 7, 2011, SunSi Energies acquired a 60% equity interest in the Wendeng He Xie Silicon Company Ltd (**Wendeng**), a trichlorosilane production facility located in Weihai City, China for $3.15 million. Management expects the acquisition to be immediately accretive, making SunSi profitable on a consolidated basis. At closing the acquisition, SunSi began consolidating all of Wendeng's revenues, and 60% of its profits.

On December 8, 2010, SunSi Energies acquired 90% of **Zibo Baokai** Commerce and Trade Company, a trichlorosilane distribution company located in Zibo, China for $273,910. Zibo Baokai owns the right to distribute the trichlorosilane production of Zibo Commerce and Trade Company in the China market, and therefore enables SunSi to sell approximately 25,000 metric tons of trichlorosilane per year. As a result, SunSi will begin generating revenue immediately from the close of the acquisition.

[31] The Board of Directors has the right to set the preferred stock's designations, preferences, limitations, privileges, qualifications, as well as dividend, conversion, voting, and other special or relative rights.

VALUATION

The appropriate valuation methodology for SunSi Energies is based on price-to-sales (P/S) due the character of SunSi's enterprise, namely a small-capitalization company with current negative profitability, but with a sales profile that should grow through acquisitions and capacity additions. Ultimately, the growing revenue stream should manifest itself into positive earnings, which is expected as early as the upcoming quarter. Based on historical norms for similar companies, a price-to-sales valuation range between 1.1 and 3.2 is expected. Our $3.25 price target is based on a 2.15 price-to-sales ratio valuation, the average of the expected range. At $3.00, the current P/S ratio of SunSi's stock is 2.00.

The valuation process for small and mid-cap companies serving the alternative energy industry is based upon profiling the potential level of a specific company's profitability through gross margin analysis, and then applying that input to a price-to-sales valuation methodology. The gross margin indicates a company's structural cost advantage based on cost of goods sold. Analyzing a company's level of profitability is often the most important aspect of equity valuation analysis. Upon accounting for Wendeng's operations, SunSi's overall gross margin is expected to be 22%, a blend of a 2% gross margin on Baokai's distribution revenue and 35% on Wendeng's production sales. Even though SunSi's management expects to be able to increase Baokai's gross margin by signing contracts with new customers, our valuation methodology will not incorporate for a higher overall gross margin until at least one initial new contract is signed.

Price-to-sales valuation incorporates a company's ability to increase revenues and gain market share. Given management's stated business plan is to focus on solar-grade trichlorosilane, a differentiated product in an industry with high barriers to entry, and to increase the sales base by acquisitions and capacity additions, SunSi Energies is expected to expand its sales base significantly. The quarterly run-rate of sales for the fourth fiscal quarter of 2011 is $4.6 million at Baokai and $7.4 million at Wendeng. By extrapolating the upcoming quarterly results, the annual sales run-rate is $48 million or $1.50 sales-per-share, based on 32 million shares outstanding at fiscal year-end; we expect at least 3 million shares to be issued to fund the Wendeng acquisition. Comparable companies have a historical price-to-sales valuation range between 1.1 and 3.2. Since Wendeng's revenues have not yet been reported on a consolidated basis and since the financing of the Wendeng transaction is still pending, we are using the mid-point of the expected valuation range to determine our initial target price of $3.25 (a 2.15 price-to-sales ratio).

RISKS

- European countries have contributed significantly to global demand for photovoltaic products, having stimulated solar cell energy installations with feed-in tariff programs, especially Germany in 2009 and Spain in 2008. However, these subsidies diminished in the second half of 2010, leading to the conjecture that the global photovoltaic market will experience a decline in 2011.
- As with almost all development stage companies, the accounting firm's opinion in the last 10-K (for the period ending May 31, 2010) contains the standard language for a company without revenues, namely "The consolidated financial statements have been prepared assuming that the Company will continue as a going concern. …the Company has cash flow constraints, an accumulated deficit, and has suffered recurring losses from operations. These factors, among others, raise substantial doubt about the Company's ability to continue as a going concern." However, the accounting firm (Child, Van Wagoner & Bradshaw, PLLC) opine that the financial statements "present fairly, in all material respects, the financial position of SunSi Energies." In addition, since the company has begun to report revenues in the latest quarter and has positive working capital of $197,206, management believes that the going concern disclaimer will not appear in the accountant firm's opinion in the upcoming 10-K for the fiscal year ending May 31, 2011.

INSIDER TRADING AND OWNERSHIP

Corporate insiders own 32.5% of the outstanding common stock. David Natan (CEO) owns 2,012,231 shares[32], Richard St-Julien (Vice President, Secretary and Director) indirectly owns 6,003,200 shares[33] and Michael Laporte, the former CEO, holds 1,000,000 shares[34]. All insider shares are subject to lock-up periods which are still in force.

FINANCIAL STATEMENT ANALYSIS

SunSi Energies, Inc.
Consolidated Statements of Operations and Retained Earnings

Annual Earnings Analysis

For the years ending May 31 (in $ US)	2008	2009	2010	2011 E	2012 E
Revenue:	**0**	**0**	**0**	**16,622,360**	**48,000,000**
Cost of sales	0	0	0	14,960,417	39,823,143
Gross Profit	**0**	**0**	**0**	**1,661,943**	**8,176,857**
Professional fees		124,435	545,049	498,511	530,914
General & administrative	24,937	45,420	76,586	629,184	1,520,000
Mining exploration	9,440		0	0	0
Total Expenses	**34,377**	**169,855**	**621,635**	**1,127,695**	**2,050,914**
Pre-tax profit from operations	**(34,377)**	**(169,855)**	**(621,635)**	**534,248**	**6,125,943**
Income (loss) before income taxes	(34,377)	(169,855)	(621,635)	534,248	6,125,943
Future income taxes			0	133,562	1,531,486
Net income for the year	**(34,377)**	**(169,855)**	**(621,635)**	**400,686**	**4,594,457**
Net income per common share (diluted)	**(0.00)**	**(0.01)**	**(0.02)**	**0.01**	**0.13**
Weighted average common shares outstanding - diluted	26,760,000	26,760,000	26,972,486	28,194,040	35,181,750

Quarterly Earnings Analysis

	1Q 2010	2Q 2010	3Q 2010	4Q 2010	**2010**	1Q 2011	2Q 2011	3Q 2011	4Q E 2011	**2011 E**
Revenue:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,622,360**	**12,000,000**	**16,622,360**
Cost of sales	0	0	0	0	**0**	0	0	4,528,392	10,432,025	**14,960,417**
Gross Profit	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**93,968**	**1,567,975**	**1,661,943**
Professional fees	158,406	275,332	16,888	94,423	545,049	117,237	205,741	75,533	100,000	498,511
General & administrative	3,933	2,549	41,477	28,627	76,586	41,159	25,972	122,053	440,000	629,184
Mining exploration										0
Total Expenses	**162,339**	**277,881**	**58,365**	**123,050**	**621,635**	**158,396**	**231,713**	**197,586**	**540,000**	**1,127,695**
Pre-tax profit from operations	**(162,339)**	**(277,881)**	**(58,365)**	**(123,050)**	**(621,635)**	**(158,396)**	**(231,713)**	**(103,618)**	**1,027,975**	**534,248**
Income (loss) before income taxes	(162,339)	(277,881)	(58,365)	(123,050)	(621,635)	(158,396)	(231,713)	(103,618)	1,027,975	534,248
Future income taxes								23,492	256,994	133,562
Net income for the year	**(162,339)**	**(277,881)**	**(58,365)**	**(123,050)**	**(621,635)**	**(158,396)**	**(231,713)**	**(127,110)**	**770,981**	**400,686**
Net income per common share (diluted)	**(0.01)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.02)**	**(0.01)**	**(0.01)**	**(0.00)**	**0.03**	**0.01**
Weighted average common shares outstanding - diluted	26,760,000	26,894,478	27,075,278	27,160,188	26,972,486	27,428,995	27,483,665	27,681,750	30,181,750	28,194,040

[32] David Natan's shares are earned in increments over a 39 month period, and become vested during the period from January 2013 to April 2014.

[33] Through Costa Rica-based Endeavour Enterprises LLC, Richard St-Julien owns 6,000,000 shares that are subject to a two year lock-up agreement.

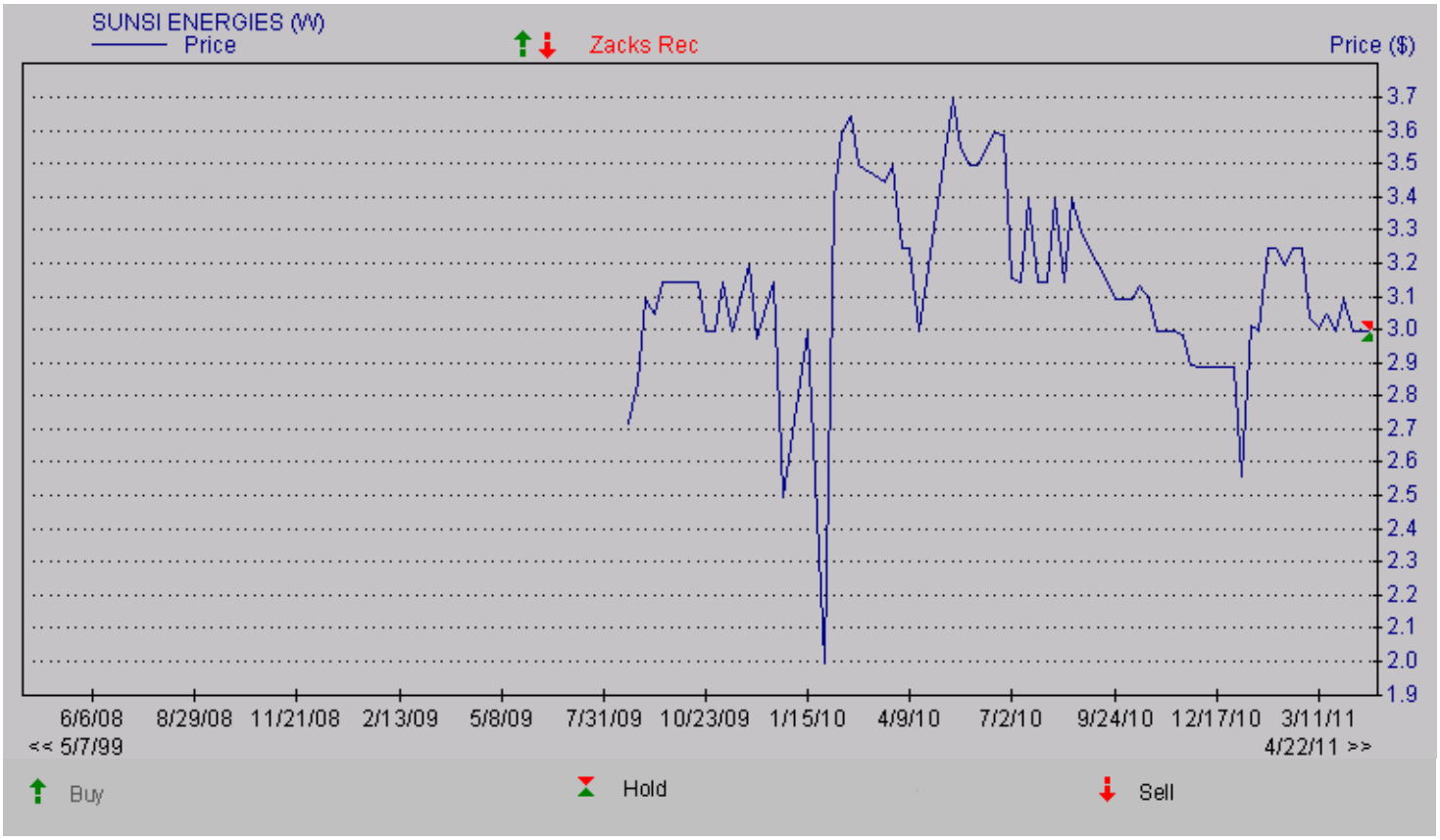
[34] Michael Laporte's shares are subject to a two year lock-up agreement.

SunSi Energies, Inc.

Consolidated Balance Sheets
(in $ US)

For the years ending May 31	2008	2009	2010	2011 E	2012 E
ASSETS					
Cash and cash equivalents	705	4,190	598,648	1,144,112	1,144,112
Accounts receivable (net)	0	0	0	4,514,514	4,784,218
Deposit	0	0	0	80,000	0
Other receivables	0	0	0	95,000	665,000
Prepaid expense	0	0	0	35,000	245,000
Current Assets	705	4,190	598,648	5,868,626	6,838,330
Property, plant & equipment (net)	0	0	0	0	13,761,085
Intangible assets (net)				273,910	273,910
Total Assets	**705**	**4,190**	**598,648**	**6,142,536**	**20,873,325**
LIABILITIES					
Accounts payable	0	0	0	1,963,458	1,500,000
Accrued liabilities	4,813	143,741	149,538	547,000	435,000
Advances from related party	0	20,836	0	0	0
Advances payable	0	0	230,981	0	0
Compensation payable to related party	0	0	5,671	0	0
Income tax payable	0	0	0	133,562	0
Current Liabilities	4,813	164,577	386,190	2,644,020	1,935,000
Minority interests	0	0	0	7,048	52,400
Share capital	26,760	26,760	27,312	29,389	35,389
Additional paid in capital	11,240	24,816	1,018,764	4,753,488	15,547,488
Retained earnings (deficit)	(42,108)	(211,963)	(833,798)	(1,291,663)	3,302,794
Accumulated other comprehensive income				254	254
SHAREHOLDERS' EQUITY	(4,108)	(160,387)	212,278	3,491,468	18,885,925
Total Liabilities and Equity	**705**	**4,190**	**598,468**	**6,142,536**	**20,873,325**
Common shares outstanding	26,760,000	26,760,000	27,312,500	32,000,000	38,000,000

HISTORICAL ZACKS RECOMMENDATIONS



DISCLOSURES

The following disclosures relate to relationships between Zacks Investment Research ("ZIR") and Zacks Small-Cap Research ("Zacks SCR") and the issuers covered by the Zacks SCR analysts in the Small-Cap Universe.

ZIR or Zacks SCR Analysts do not hold or trade securities in the issuers which they cover. Each analyst has full discretion on the rating and price target based on their own due diligence. Analysts are paid in part based on the overall profitability of Zacks SCR. Such profitability is derived from a variety of sources and includes payments received from issuers of securities covered by Zacks SCR for non-investment banking services. No part of analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in any report or blog.

ZIR and Zacks SCR do not make a market in any security nor do they act as dealers in securities. Zacks SCR has never received compensation for investment banking services on the small-cap universe. Zacks SCR does not expect received compensation for investment banking services on the small-cap universe. Zacks SCR has received compensation for non-investment banking services on the small-cap universe, and expects to receive additional compensation for non-investment banking services on the small-cap universe, paid by issuers of securities covered by Zacks SCR. Non-investment banking services include investor relations services and software, financial database analysis, advertising services, brokerage services, advisory services, investment research, and investment management.

Additional information is available upon request. Zacks SCR reports are based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Because of individual objectives, the report should not be construed as advice designed to meet the particular investment needs of any investor. Any opinions expressed by Zacks SCR Analysts are subject to change. Reports are not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. Zacks SCR uses the following rating system for the securities it covers. Buy/Outperform: The analyst expects that the subject company will outperform the broader U.S. equity market over the next one to two quarters. Hold/Neutral: The analyst expects that the company will perform in line with the broader U.S. equity market over the next one to two quarters. Sell/Underperform: The analyst expects the company will underperform the broader U.S. Equity market over the next one to two quarters.

The current distribution of Zacks Ratings is as follows on the 1025 companies covered: Buy/Outperform- 14.0%, Hold/Neutral- 78.3%, Sell/Underperform – 6.6%. Data is as of midnight on the business day immediately prior to this publication.