

SUNSI ENERGIES INC.

High Yield Technology + High Value Proposition = Major Revenue

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SUNSI ENERGIES, INC. (OTC:QB – SSIE - \$5.09)

Rating: Speculative Buy

Price Target: \$9.00

KEY STATISTICS

Price 12/13/12:	\$5.09
52-Week Range:	\$8.14 – 2.10
Est. Shares Out.:	16.2M
Market Cap (mil):	\$82.5M
Est. 3 Mo Avg Vol:	3,000
Exchange:	OTC:QB
Book Value/Share (mrq):	\$0.45
Cash Per Share:	\$0.04
Debt to Tot Cap:	0%
Ann Div Yield:	N/A
Insider Own:	5.8M
Inst. Own:	N/A
Public Float:	3.0M

Rev(mil)	2011A	2012E	2013P
Mar	\$5,500	\$500	
Jun	\$10,100	\$530	
Sept	\$10,300	\$230	
Dec	\$2,400	\$300E	
FY	\$28,300	\$1,560E	\$40,000
CY	\$28,300	\$1,560E	\$40,000
FY/REV	2.9x	NMF	3.7x
CY/REV	2.9x	NMF	3.7x
EPS	2011A	2012E	2013P
Mar	\$0.00	(\$0.02)A	
Jun	\$0.00	(\$0.02)A	
Sept	\$0.00	(\$0.04)A	
Dec	(\$0.16)	(\$0.05)E	
FY	(\$0.17)	(\$0.09)E	\$0.00
CY	(\$0.17)	(\$0.09)E	\$0.00
FY P/E	N/A	N/A	N/A
CY P/E	N/A	N/A	N/A

INVESTMENT HIGHLIGHTS

SunSi Energies Inc.'s approach to the manufacture, marketing and distribution of high yield and high value energy products and solutions should result in significant revenue growth in 2013 and beyond.

The Company operates in 3 distinct segments: *Renewable Energy* through its majority stake in waste heat recovery pioneer TransPacific Energy, *LED Lighting* via its exclusive North American distribution relationship with LED leader Lightsky, and *TCS Production and Sale* through its China-based subsidiaries.

TransPacific Energy designs and sells energy systems which maximize heat recovery and convert waste heat into clean electricity. SunSi has built a pipeline of business with Fortune 1000 companies which should begin to bear significant fruit in 2013.

SunSi's innovative LED model makes it hard for customers to say "no". SunSi provides the LED lighting to the customer in a complete turnkey package that includes financing in some cases at no initial cost where Company will only share the value of the annual cost savings over a multi-year timeframe, thereby creating the potential for huge recurring sales and margins.

Considering it meets all of the listing requirements, we expect that SunSi could begin trading at any time on NASDAQ between now and early 2013. We expect this would add liquidity and also boost the stock.

With no material debt, a small float, and innovative and high value offerings, we believe that 2013 will be a tremendous year for SunSi. Our preliminary forecast calls for \$40M in revenue in 2013 following \$1.6M in 2012. Moreover, we believe that the stock could reach \$9.00 next year, which represents 3.7x FY13E sales. We rate these shares Speculative Buy.

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COMPANY SNAPSHOT

U.S.-based SunSi Energies Inc. is a global company whose diverse products and solutions focus on renewable energy with the objective of improving customers' energy efficiency and reducing costs.

SunSi's 51%-owned subsidiary, TransPacific Energy Inc. ("TPE") has patented a technology which uses proprietary multiple component fluids that are environmentally sound, non-toxic and non-flammable. TPE produces Organic Rankine Cycle units (ORC), which use enhanced heat transfer techniques to maximize heat recovery and efficiently convert waste heat directly from industrial processes, thermal solar, geothermal biomass and landfill as well as other untapped heat into renewable electrical energy. Custom formulated mixtures efficiently capture and convert heat directly from the heat source at temperatures ranging from 80° F to 1000° F. This is a far broader range than any other ORC systems on the market. Other ORC's are typically limited to temperatures of up to 500°F. As a result, TPE offers what may be the most efficient and broadly applicable waste heat capture and energy conversion systems available in the market. TPE's systems in certain applications reduce operating and maintenance costs, thereby significantly improving return on capital expenditures, thus making the purchase of waste heat recovery systems which previously yielded nominal savings, economically viable.

SunSi is the exclusive distributor in the U.S., Canada, and Mexico of Light Emitting Diode ("LED") commercial lighting products and fixtures for a premier LED manufacturer, Lightsky. An LED is a semiconductor device which converts electricity into light. LED lighting is considered "green" due to the absence of dangerous chemicals and an accompanying significant reduction in energy consumption based on the application. The reduction in energy consumption can reach as high as 50% to 70% of traditional lighting products.

Through its legacy businesses, SunSi is also a significant manufacturer and distributor of trichlorosilane ("TCS") in China. TCS is a specialty chemical primarily used in the production of polysilicon, which is an essential raw material in the production of solar cells for PV panels that convert sunlight to electricity. TCS is considered to be the first product in the solar PV value chain before polysilicon, and is also the principal source of ultrapure silicon in the semiconductor industry.

TPE: INHERENT ADVANTAGES

The renewable energy industry is expected to reach more than \$250 billion by 2017. Worldwide initiatives and government mandates including the 2009 American Recovery and Reinvestment Act are driving the implementation and utilization of renewable and converted sources of energy and fuel such as ORC.

ORC technology is a uniquely effective process that can be adapted for use in numerous industries and applications worldwide. The original applications of the technology were in the geothermal and solar thermal plants. Today, the largest installed bases of the technology are found in biomass, combined heat and power plants, and in the industrial processes arena including incinerators, landfills, and others.

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The size of the market in the industrial processes area in the U.S. alone is huge. Nearly 10% of the estimated 500,000 smokestacks in the U.S. represent up to 75% of untapped waste heat at above to 500°F. This waste heat could generate at least 50,000 megawatts of power. Utilizing this waste heat could generate more than \$100 billion in revenue.

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TPE-MAJOR ADVANTAGE AGAINST COMPETITORS

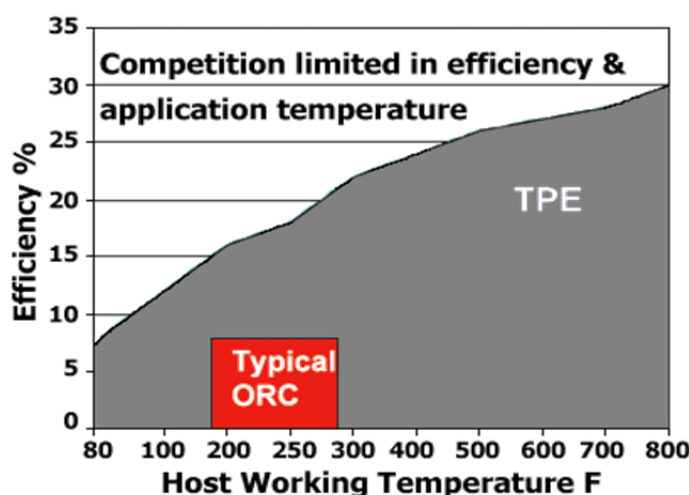


Image I. TPE ORC vs. Traditional Systems

Source: www.sunsienergies.com

The Business Model

The TPE business model is a multi-offer, which involves equipment sales and recurring revenue. Option 1 includes the sale of equipment along with its 9 patented, proprietary non-toxic refrigerants to generate clean electricity and the Company will receive recurring revenue from the electricity generated. In the second Option, the Company keeps ownership of the equipment and enters into long-term Power Purchase Agreements that are typically 20 years in length. In this scenario the Company would sell back the electricity to the customer that generates this waste heat or it would sell the clean electricity to the utility company and give a small percentage to the customer. In both scenarios the customer will also have great financial benefit. Thus, TPE and its project investors manage the power generation and share the revenue streams developed from the agreements. Over time, management plans to develop a portfolio of revenue generating assets as standalone LLC's, in addition to recording its equipment sales. The Company also plans to license TPE technology for specific markets and applications.

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The payoff for customers is huge as the technology is also eligible for various U.S. federal and some state (e.g., California) tax credits. As a result, an \$800,000 to \$900,000 TPE ORC system cost can reduce dangerous greenhouse emissions, yet pay for itself in as little as 1- 2 years depending on the cost per kWh hour of power in the jurisdiction the ORC is operating in. As a result, millions of dollars' worth of supplemental electricity is generated to be divided between SunSi and the customer. The Company has currently engaged with some high profile clients, and has a hit list of prospective customers. Therefore, we expect a number of significant contracts will be signed on 2013.

LED LIGHTING: THE PLAY OF 2013

A Light Emitting Diode (LED) is a semiconductor device that converts electricity into light. LED lighting has been around since the 1960s, but recent advances in the performance of the LED have made them commercially feasible. LED fixtures are comprised of LED diodes which are combined with circuitry, housings and controllers to create the end product, the "LED fixture". The ultimate efficiency of the LED fixture is only partly determined by the LED diode. The ultimate efficiency is determined by the way it is configured and engineered within the fixture.

Recent advances in the performance of these LEDs have made LED lighting applications commercially feasible. Lumens per watt from an LED have increased to over 140 lumens today from only 55 lumens per watt just a few years ago making LED lighting a viable and economically attractive alternative to conventional lighting options. Through Lightsky, SunSi offers an array of commercial LED products for street lights, warehouses, parking garages and lots, exterior building facades, and indoor replacements for fluorescent fixtures. LEDs are better at placing light in a single direction than incandescent or fluorescent bulbs. Moreover, due to their directional output, they have unique features that can be exploited by clever designs. Plus, LED lights are more rugged and damage-resistant than compact fluorescents and incandescent bulbs and don't flicker and emit no audible 'buzz.' In all cases, LEDs demonstrate very attractive potential levels of payback and return on investment.

The LED light is considered "green" because of the absence of dangerous chemicals and minerals with a significant reduction in energy consumption. In certain applications, LED's will reduce energy consumption by up to 80%. The paybacks on LED replacements of commercial lighting are as short as 18-36 months, but will soon be in the 6-24 month range.

Lightsky

In August 2012 SunSi acquired the exclusive North American distribution rights to distribute high performance LED lighting fixtures used in a wide array of applications. All of its products have been manufactured by the highly respected Shanghai Lightsky Optoelectronics Technology Co., Ltd. located in Pujiang Town, Minhang district, Shanghai, China ("Lightsky"). Lightsky supplies the product range from illumination LED lighting, LED video display system and architectural LED lighting. Lightsky have completed some major lighting projects such as Shanghai International Airport lighting project, 2010 Shanghai World Expo, and Hong Kong University.

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Lightsky holds a series of design and utility patents, certificates including ISO9001, CE, Rohs, and other qualifications.

Lightsky LED products perform at the highest level today surpassing traditional lighting in performance while offering energy efficiency savings up to 75%. With a longer than 50,000 hour rated operating life, maintenance costs and manpower diversions (including bulb and ballast replacement) will become a "thing of the past".

The use of higher quality diodes combined with proprietary circuitry, electronics and quality assembly means that Lightsky's LEDs can achieve the 50,000-hour rated life of an LED. We believe this performance exceeds all current competition. This is one of the primary differentiators in the industry, and what makes Lightsky's products proprietary.



Image II. Lightsky LED Streetlights
Source: Lightsky website

The Real Key to LED Success: The Business Model

The Company is targeting large commercial and institutional users as well as government entities. In addition to partnering with Lightsky, SunSi recently announced a partnership on the installation and design side with Commonwealth Energy LLC, a Pennsylvania-based energy consulting firm focused on the retro-fitting and installation of energy saving LED lighting systems. Commonwealth provides a wide array of services including the design and installation of new "green" energy systems, energy savings audits with payback analysis, assistance in obtaining tax rebates and credits from local municipalities on energy saving projects, as well as offering financing alternatives to facilitate new projects.

Since its inception in 2007, Commonwealth has serviced more than 600 domestic and international clients, retrofitted over 15 million square feet with new lighting, delivered greater than 112 MWh in savings, and generated in excess of \$10.0 million of tax incentives. In our view, this relationship, along with Lightsky's history of large scale installations, is key to garnering large scale deployments as SunSi can offer a turnkey solution.

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As noted above, the Company's business model leaves customers little room to say "no". SunSi is marketing its LED lighting in a turnkey package at a highly competitive price with financing; and in some cases at no upfront cost and only to share the value of the annual cost savings over a multi-year timeframe, thereby creating the potential for huge recurring revenue and margins.

SunSi's innovative marketing approach and strategy of targeting high profile multi-location companies has already yielded some large potential LED installations in a very rapid period of time since they acquired exclusive distribution rights. As a result, we expect that during 2013, SunSi's LED deals could result in large-scale installations and LED retrofits that result in multi-million dollar recurring revenue streams.

It is a win-win for all parties. Customers begin generating material profits in a 1.5 to 2.0 year time frame and they are able to utilize better, longer lasting, environmentally friendly lighting. SunSi begins generating revenues and profits immediately from sale of LED lights and in some cases, from the customer savings. The Company has already secured some excellent trials, including a multi-billion dollar private hospital group location, a national tire center location, and at a gaming company.

RISK FACTORS

In our view, the greatest risk to these shares is not achieving success in obtaining large-scale contracts, but the timing of the receipt of these deals. It is not uncommon that the larger the deal, the more the greater the potential for delays. Nonetheless, we believe that management is prepared for these contingencies. Another risk is related to the NASDAQ uplisting, as there is no assurance that it will occur in the near term, or at all. We deem this as an unlikely event, but investors should view this as a risk. Finally, the Company faces competition from other, or larger, firms in the space or even new entrants, should they decide to enter the Company's business segments. In our view, all of these risks are consistent with the companies of SSIE's size. Thus, investors should use progress in market penetration and other news as a performance measure since these shares could be news-driven until SSIE achieves cash flow positive status.

VALUATION AND CONCLUSION

SunSi was formed to take advantage of opportunities in the solar segment of the renewable energy market via the production of Trichlorosilane (TCS) in China. While this legacy business will continue to add to revenue and the bottom line, the growth drivers for SunSi are clearly the ORC and LED businesses, respectively.

On the ORC side, the market opportunity is in the billions and through its TPE ownership SunSi has a proprietary and environmentally safe technological advantage over the competition which quite frankly, cannot apply their own solutions beyond a narrow market. On the LED side, the opportunity is just as huge.

As a result, while the legacy business will generate typical product sales, we believe SunSi is migrating to a very profitable and highly visible, recurring series of revenue streams which could enable the Company to obtain a leadership status in its segments. As deals are signed, we believe valuation expansion will quickly occur, and could even be at a premium, once the Street understands the simplicity of the models.

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The past few months have seen sweeping changes, including a 1:2 reverse stock split and declining revenue in the legacy business. Still, management has kept cash losses to a minimum and the Company has very minimal long term debt on its balance sheet. With the strength and experience of its management team and independent board, SunSi appears to be on the verge of a breakout year.

This breakout could occur in conjunction with a long-awaited move upstream to NASDAQ. The Company meets all financial requirements, as far as we can tell, and we believe the move would add liquidity and enhance awareness and trading volume.

It should be noted that we previously covered the Company on a sponsored research basis through our *Opportunity Research* product. However, given the business model and likely move upstream to NASDAQ, we have elected to cover the Company through our *Select Research* product, which is not a sponsored research offering.

We rate these shares Speculative Buy and recognize that until a few of these recurring revenue contracts are closed, the stock will be event-driven. As the model begins to be demonstrated to the Street, we believe that SSIE could reach \$9.00 next year. We will have more clarity on our preliminary \$40 million revenue forecast during 1Q13.

**SUNSI ENERGIES, INC.****Analyst: Robert Goldman**

Rob Goldman has over 20 years of investment and company research experience as a senior research analyst and as a portfolio and mutual fund manager. During his tenure as a sell side analyst, Rob was a senior member of Piper Jaffray's Technology and Communications teams. Prior to joining Piper, Rob led Josephthal & Co.'s Washington-based Emerging Growth Research Group. In addition to his sell-side experience Rob served as Chief Investment Officer of a boutique investment management firm and Blue and White Investment Management, where he managed Small Cap Growth portfolios and *The Blue and White Fund*.

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