



## NEWS RELEASE

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# Synthesis Energy Systems, TSEC and Midrex Technologies Sign Exclusive Marketing Agreement for Clean Coal Gasification Based Direct Reduced Iron Facilities

May 28, 2014

## **Economic, Efficient and Eco-Friendly Joint Technologies Will Have Widespread Application in Steel Industry**

**Charlotte, NC** – Synthesis Energy Systems, Inc. (SES) (NASDAQ: SYMX) announced that its wholly owned subsidiary, SES Technologies, LLC, Shanghai-based Jiangsu Tianwo-SES Clean Energy Technologies Ltd. (TSEC) and Midrex Technologies, Inc. (Midrex), a subsidiary of Kobe Steel Limited (ADR-OTC:KBSTY), have entered into an exclusive agreement for the joint marketing of coal gasification based direct reduced iron (DRI) facilities in China. These facilities will combine the premiere SES Gasification Technology with the industry-leading MIDREX® Direct Reduction Process to create syngas from low quality coals in order to convert iron ore into high-purity DRI.

Midrex and SES will work together to develop and implement the marketing and commercialization strategy, with the intention of securing the product offering's first customers, initially in China. The partners have engaged TSEC to aid in the marketing of these powerful gasification based DRI facilities in China. Additionally, TSEC will supply the gasification equipment and licensing of the SES Gasification Technology to any SES-Midrex DRI projects in its region, which includes all of China, as well as Indonesia, Malaysia, Mongolia, the Philippines and Vietnam.

SES and Midrex executed the agreement after conducting an early engineering co-development effort of the joint technologies, which provided results leading the partners to believe that this clean, efficient and economic product will have widespread application even outside of China, especially in regions with low-quality, low-cost coal, which comprise more than 50% of the world's coal resources.

The new coal gasification based DRI plants are intended to support China's growth in an eco-friendly way as China moves away from high polluting and inefficient blast furnaces to new, cleaner technologies for the fabrication of iron product for steel manufacturing. China is the largest producer of steel in the world, and currently has no DRI-based plants. The Chinese central government is encouraging the replacement of outdated facilities that generate higher emissions with lower efficiencies with new ironmaking technology.

"We are very pleased to be strategically aligned with the worldwide leader in DRI steel in this important SES market vertical," said Robert Rigdon, SES president and CEO. "We believe this is a very timely collaboration with Midrex because of the shifting needs in China for cleaner, economical solutions for steelmaking, and together working with our TSEC joint venture, we intend to enable China to economically utilize the country's abundant, untapped low-rank coal and lower quality iron ore resources to fuel the manufacturing of steel required to build its cities and infrastructure, cleanly and efficiently."

"New DRI production technologies such as MXCOL® represent the future of cleaner high quality ironmaking especially in areas such as China," said James D. McClaskey, President and CEO of Midrex Technologies, Inc. "Jointly with SES, we look forward to providing new technology that will meet evolving environmental needs to make top-grade DRI products for regional steelmakers by best utilizing local energy resources and raw materials."



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### **About Synthesis Energy Systems, Inc.**

Synthesis Energy Systems (SES) is a Houston-based technology company focused on bringing clean high-value energy to developing countries from low-cost and low-grade coal and biomass through its proprietary gasification technology based upon U-Gas<sup>®</sup>, licensed from the Gas Technology Institute. The SES Gasification Technology enables greater fuel flexibility for both large-scale and efficient small- to medium-scale operations close to fuel sources. Fuel sources include low-rank, low-cost, high-ash, high-moisture coals, which are significantly cheaper than higher grade coals, many coal waste products, and biomass feedstocks. For more information, please visit: [www.synthesisenergy.com](http://www.synthesisenergy.com).

### **About Midrex Technologies, Inc.**

Midrex Technologies, Inc., a wholly owned subsidiary of Kobe Steel, is an international process engineering and technology company providing steelmakers with commercially proven solutions for greater profitability and has been the leading innovator and technology supplier for the direct reduction of iron ore for more than 40 years. The company offers eco-friendly technologies for ironmaking that provide high productivity, outstanding product quality and cost competitiveness. Midrex has built its foundation upon the MIDREX<sup>®</sup> Direct Reduction Process that converts iron ore into high-purity direct reduced iron (DRI) for use in steelmaking, ironmaking and foundry applications. Each year, MIDREX<sup>®</sup> Plants produce about 60 percent of the world's DRI. For more information, visit: [www.midrex.com](http://www.midrex.com).

### **About Jiangsu Tianwo-SES Clean Energy Technologies Ltd. (TSEC)**

Jiangsu Tianwo-SES Clean Energy Technologies Ltd. (TSEC), is a joint venture between Synthesis Energy System's wholly owned subsidiary, SES Asia Technologies, Ltd. and Zhangjiagang Chemical Machinery Co., Ltd. (TSEC) (Shenzhen listing code: 002564). The joint venture was formed to bring clean energy technologies and turnkey SES gasification systems to China and select Asian markets, combining SES's advanced proprietary gasification technology with the market reach of one of China's leading coal-chemical equipment manufacturers. For more information on TSEC, visit: [www.zcmchina.com](http://www.zcmchina.com).

### **Forward-Looking Statements**

This press release includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are subject to certain risks, trends and uncertainties that could cause actual results to differ materially from those predicted. Among those risks, trends and uncertainties are the development stage of SES operating assets; the ability of our ZZ joint venture to effectively operate XE's methanol plant and produce methanol; the ability of our product with Yima to produce earnings and pay dividends; our ability to develop and expand business of the TSEC joint venture in the joint venture territory; our ability to develop the SES power business unit and marketing arrangement with GE and its other business verticals, steel and renewables; our ability to successfully develop the SES licensing business; to reduce operating costs; our limited history, and viability of our technology; commodity prices, and the availability and terms of financing; our ability to obtain the necessary approvals and permits for future products; our ability to raise additional capital, if any, and our ability to estimate the sufficiency of existing capital resources; the sufficiency of internal controls and procedures; and our results of operations in countries outside of the U.S.,



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where we are continuing to pursue and develop products. Although SES believes that in making such forward-looking statements our expectations are based upon reasonable assumptions, such statements may be influenced by factors that could cause actual outcomes and results to be materially different from those produced by us. SES cannot assure you that the assumptions upon which these statements are based will prove to have been correct.

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