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Synthesis Energy Systems and Midrex Announce Milestone towards State-of-the-Art MXCOL®-SES Direct Reduced Iron Gasification Island for Indian Market

Global partners are expanding the technical and commercial definition of the combined first-in-class technologies for specific opportunities - developing an implementation strategy that will be consistent with the government's "Make in India" campaign

HOUSTON and CHARLOTTE, N.C., Jan. 08, 2018 (GLOBE NEWSWIRE) -- Synthesis Energy Systems, Inc. (SES) (NASDAQ:SES), and Midrex Technologies, Inc. (Midrex), a subsidiary of Kobe Steel, Ltd. (ADR-OTC:KBSTY), today announced that the partners are proceeding with work to expand the technical and commercial definition of MXCOL®-SES DRI for possible commercial opportunities in the Indian market. SES is a global leader in the clean and efficient production of low-cost synthesis gas for high value energy and chemical products. Midrex is the world leader in Direct Reduction Ironmaking Technology.

Midrex has engaged SES to complete a package of engineering deliverables that are focused on advancing the technical and commercial definition necessary to make proposals to build the MXCOL®-SES DRI plants in India. This exercise is scheduled to be completed in the first quarter of 2018.

 Midrex Technologies, Inc.

The fully integrated and optimized DRI solution combines the industry-leading MIDREX® Process using the MXCOL® configuration with the premier SES Gasification Technology (SGT) to produce clean syngas from local, low-quality Indian coal. The syngas is integrated into MIDREX® technology to convert iron ore into high-purity DRI, and commercialized as the MXCOL®-SES DRI process. The integration of these two technologies is of strategic importance because it offers an economical alternative to natural gas and LNG-based DRI through utilization of coal, and especially low-quality coals, to produce DRI steel products. The new study's specific project would use Indian coal with 39% ash and 5% moisture.

"Together, with our global DRI partner, Midrex, we are creating an optimized coal gasification DRI solution combining our first-in-class technologies. While this integrated technology combination has broad applicability in any region where natural gas and LNG is expensive or lacks infrastructure and availability, it has been especially well received thus far in India, a heavy steel producing nation with high gas prices and abundant low-quality coal," said DeLome Fair, SES's President and Chief Executive Officer. "We are excited that Midrex has advanced the marketing of the MXCOL®-SES plant concept to this stage and our engineers are working diligently towards completing the work. While the decision to construct a facility ultimately lies with the project owners, we believe that upon completion of this work we will be well positioned in the Indian market for an order commitment related to MXCOL®-SES DRI technology at some point in 2018."

"After understanding the MXCOL®-SES potential in India, related to technology and operating costs, both Midrex and SES are now proceeding jointly with the necessary work required to define an optimum financial solution for making commercial offers for MXCOL®-SES DRI projects to Indian steel makers," said Stephen C. Montague, president and Chief Executive Officer of Midrex Technologies, Inc. "Additionally, we are defining an implementation strategy for these projects that includes significant sourcing of components within India such that our offering falls in line with the government's 'Make in India' campaign."

SES and Midrex entered a Joint Marketing and Product Commercialization Agreement in 2014 and further expanded the collaboration in 2015 when the companies entered into the Midrex-SES Project Alliance Agreement to work together exclusively on a global basis to provide an integrated MXCOL® and SGT solution. Under these two agreements, Midrex leads the marketing, sales, proposal development, and project execution for coal gasification DRI projects. Midrex may also coordinate the construction of the fully integrated MXCOL®-SES DRI solution for customers who desire such an execution

strategy. SES provides the DRI gasification technology for each project including engineering, key equipment, and technical services.

India is the second largest producer of DRI in the world, with most production utilizing rotary kilns that result in high operating costs and low DRI quality. The MXCOL[®]-SES process will allow better project economics and improves the quality of the DRI, since the captive production using the MXCOL[®]-SES technology is less costly than the recycled scrap used in conventional DRI processes today.

About Synthesis Energy Systems, Inc.

Synthesis Energy Systems (SES) is a Houston -based technology company focused on generating clean, high-value energy from low-cost and low-grade coal, biomass and municipal solid waste through its proprietary technology for conversion of these resources into a clean synthesis gas (syngas) and methane. SES's proprietary technology enables the production of clean, low-cost power, industrial fuel gas, chemicals, fertilizers, transportation fuels, and substitute natural gas, replacing expensive natural gas-based energy. SES's technology can also produce high-purity hydrogen for cleaner transportation fuels. SES 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, waste coals, biomass, and municipal solid waste feedstocks. SES: Growth With Blue Skies. For more information, please visit: 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[®] 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[®] Plants produce over 60 percent of the world's DRI. For more information, visit: www.midrex.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 and are subject to certain risks, trends and uncertainties that could cause actual results to differ materially from those projected. 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 projected by us. SES cannot assure you that the assumptions upon which these statements are based will prove to be correct. Please refer to our latest Form 10-K available on our website at www.synthesisenergy.com.

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