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## **Synthesis Energy Systems, TAURON Wytwarzanie, and SES EnCoal Energy Announce Feasibility Study for First Conventional Power Boiler Clean Energy Conversion Projects in Poland**

*Poland's Institute of Coal Chemistry is progressing with a detailed design assessment and economic study for this novel clean energy facility*

Once in operation, this SES Gasification Technology project is expected to demonstrate the country's ability to upgrade many of its power facilities to meet EU and IED targets, allowing use of coal wastes, increase energy efficiency, and gain energy independence with domestically produced gas supply

HOUSTON, Feb. 15, 2018 (GLOBE NEWSWIRE) -- Synthesis Energy Systems, Inc. (SES) (NASDAQ:SES), a global leader in the clean and efficient production of low-cost synthesis gas for high value energy and chemical products; TAURON Wytwarzanie S. A., one of Poland's largest energy companies, and SES's Poland platform company, SES EnCoal Energy sp. z o.o. (SEE), announced today their execution of a Letter of Intent to develop Poland's first SES Gasification Technology (SGT) facility. TAURON has contracted Poland's Institute of Coal Chemistry (IChPW) to complete a detailed preliminary design assessment and economic study for the conversion of its initial 200MW conventional power boiler to clean syngas. The project feasibility study has been underway since September 2017 and is scheduled to conclude in March 2018. SES and SEE have been providing engineering and analysis support to IChPW. The preliminary results presented by the IChPW to TAURON and SES have shown that conversion of TAURON's 200MW power boiler utilizing SGT Technology can be both economically attractive and environmentally beneficial. SES believes that the study should show that SGT power boiler conversion is an ideal solution capable of meeting EU and IED targets. When the study is completed and approved, TAURON intends to move forward with detailed engineering and commercial negotiations on a license order for SGT.

"Together with our SEE joint venture partner, EnInvestments sp. z o.o., we have made very good progress over the last three years introducing our technology to Poland. We couldn't be more excited that this clean energy undertaking we are announcing today is with forward-looking TAURON, one of the largest Polish energy companies with major resources in electricity generation, coal mining, and heat distribution in the country, supplying about 32 TWh to over 5.5 million customers annually," said Robert W. Rigdon, Vice Chairman of Synthesis Energy Systems, Inc. "This project feasibility study is already well-advanced and the results to date indicate that SGT is a novel, replicable and widely applicable clean energy solution for coal-rich Poland's power generation sector with ability to efficiently, cleanly and economically convert its vast coal and coal waste resources, blended with available renewable refused derived fuels (RDF), to supply its citizens with needed energy resources."

The project feasibility study by the IChPW is for the first 200MW project featuring an upgrade for a conventional power boiler from the combustion of coal fuel to the use of versatile, clean and low-cost syngas generated by industry-leading, feedstock-fuel-flexible SGT. The project scope includes an input feedstock blend of local coal, coal wastes, and RDF. The goal of the clean energy conversion project, should it move forward into development, is to establish best-in-class, environmentally responsible cleaner coal facilities to provide Polish industries and beyond superior economic benefits using local feedstock, as compared to the use of expensive, imported natural gas and LNG.

"Our country has a pressing, strategic need to continue to extract energy from our large reserves of coal. We have to use these energy resources for power generation because our geography is flat, so hydroelectric power is not an option, and our days are often dark and cold so solar is not a viable energy option either. We can't rely on importing expensive natural gas to solve all our energy needs. This unique SGT technology allows us to use our local resources in the cleanest, most efficient manner possible, to improve our economy, benefit our citizens, and improve the environment," said Jacek Pydo, principal owner of EnInvestments and President of SEE. "Together with SES, we are excited about our country's independent-energy future, and eager to help TAURON accomplish its aim to achieve best-in-class environmental performance and extend the life of its several coal-fired power generation facilities, each with approximately 200MW capacity. To enhance local fuel flexibility and lower lifecycle operating costs for efficient power generation for the citizens and government of Poland is something all of us are committed to. We look forward to the Institute of Coal Chemistry's analysis, as we expect positive results."

SGT's advanced coal and renewable conversion technology is well positioned to help the country meet its energy

requirements. According to the International Energy Agency's 2016 Review of Energy Policies of IEA Countries for Poland, the country's current electricity requirements are more than 80% supplied by conventional coal-based generation, and based on installed capacities, wind and solar alone are unable to sustain the baseload requirements in Poland. The Polish government has expressed a strong desire to maintain energy independence using domestic coal reserves, and it predicts that 50% of Poland's energy needs will be serviced by advanced cleaner coal technologies through 2050.

"We are continuing our due diligence on SES's technology, following our team's review this past summer of multiple SGT commercial projects operating in China, which confirmed first-hand this technology's efficiency and performance. We are undertaking this detailed preliminary analysis, in part, to further examine this technology's unique capability for efficient and low-cost operation utilizing waste coal and co-feeding renewable RDF," said Janusz Tchórz, Director of Technology for TAURON Wytwarzanie S. A. "Our goal is to enable Poland to adhere to EU guidelines, while at the same time answer our country's need to cleanly convert our massive coal resources, with a blend of renewable wastes, to upgrade the nation's power and energy consumption facilities, economically in an environmentally appropriate manner."

Coal is of strategic importance to Poland, which, unlike other EU member states, has substantially larger reserves and uses these energy resources for power generation. According to the BP Statistical Review of World Energy June 2017, total proved reserves in Poland at the end of 2016 were 24.2 billion tons (BT), of which 18.7 BT were bituminous and anthracite, and 5.5 BT lower grade sub-bituminous and lignite. It is estimated that Poland's coal industry generates eight to nine million tons of unmarketable coal wastes per year, which SGT can uniquely use as a low-cost feedstock for its facilities.

### **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](http://www.synthesisenergy.com).

### **About EnInvestments sp. z o.o.**

EnInvestments is a Warsaw, Poland based corporation, and is a Polish holding company organizing the implementation of SES coal gasification technology, with special emphasis on low-quality carbon materials and the use of Polish resources, within the principles of a low-emission economy. EnInvestments has extensive expertise in the development of projects in the power sector in Poland and has begun development of Polish gasification opportunities. For more information, please visit [www.encoal.pl](http://www.encoal.pl).

### **About TAURON Wytwarzanie S.A.**

TAURON Wytwarzanie is the largest electricity distributor in Poland, with a distribution grid covering an area of approximately 57,000 square kilometers, which represents approximately 18.3% of Poland's total area, and consists of power lines measuring about 258,000 kilometers. The TAURON Group is the second largest electricity supplier in Poland. In 2016 the Group's Companies supplied over 32 TWh of electricity to approximately 5.3 million clients. In addition, the Group controls approximately 32% of Poland's total hard coal resources. TAURON is also the second largest electricity generator in Poland. In 2016 total capacity of Group's power plants was about 5.1 MW and annual electricity generation reached 16.8 TWh. For more information, please visit [www.tauron.pl](http://www.tauron.pl).

### **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](http://www.synthesisenergy.com).

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