Press Releases

Bixby Energy Systems' New Groundbreaking Liquefaction Technology Converts Carbon Residue from Coal to Light Sweet Crude Oil

Revolutionary Bixby Process Extracts More Than 80 Percent of all Useable Energy in Coal Compared to 31 Percent Produced through Burning - While Reducing Carbon Emissions

MINNEAPOLIS, Sept. 16 /PRNewswire/ -- Bixby Energy Systems, Inc. has added carbon liquefaction technology to its energy portfolio, which when commercialized, will allow the company to produce both synthetic natural gas and light sweet crude oil from coal without the need to burn the coal and significantly reducing harmful greenhouse gases.

The liquefaction technology, being developed with Proton Power, Knoxville, Tenn., will be integrated into the Bixby Process™ which the company announced earlier this year. The company expects to complete construction of a liquefaction beta unit in mid-2011 and plans to move into commercial production at that time.

"Discussions of energy independence rarely end with the proposal of real solutions. Our liquefaction technology has the potential to provide significant change in the balance of resources, and perhaps to change the current geopolitical and economic landscape," said Bob Walker, chairman, CEO and president of Bixby Energy Systems.

According to U.S. Energy Information Administration statistics, more than 3.2 billion barrels of crude oil were imported into the U.S. in 2009, while only approximately 1.9 billion barrels were domestically produced. Bixby's liquefaction technology has the potential to balance the import/export scale for the U.S. and other countries that may be rich in coal.

"The Bixby Process, as a whole, offers a viable and practical method to convert coal -- often deemed a problematic and dirty fuel source -- into the energy that fuels our way of life, without compromising fiscal nor environmental responsibility," said Mr. Walker.

How It Works

The Bixby Process consists of two phases: devolitization and liquefaction. The devolitization process does not burn coal, but rather superheats it in a closed-loop environment. This produces a high-quality synthetic natural gas that is not achieved in other gas conversion processes. The remaining by-product of the coal after the devolitization process is solid, semi-activated carbon material, which is used in Bixby's liquefaction process. The carbon solids are processed in a Bixby liquefaction reactor where they are combined with hydrogen, super-heated and continuously pressurized to produce a semi-refined light sweet crude oil, which can be further processed into diesel fuel, jet fuel, gasoline, or other fuel products. Any remaining non-usable material is vitrified and made into inert ingots for safe disposal.

"Our combined technology unlocks more than 80 percent of all the useable energy found in coal," said Mr. Walker. "That percentage is significantly better than the 31 percent energy currently released by coal through conventional burning technology. This increased energy output, coupled with The Bixby Process' reduction of carbon emissions by up to 65 percent, changes coal from being a problematic source of energy to an important part of the world's energy solution."

For more information about the Bixby Process, visit the company's website atwww.bixbyenergy.com or send an email to info@bixbyenergy.com.

About Bixby Energy Systems

Founded in 2001, Bixby Energy Systems (www.bixbyenergy.com), is a "new energy" company dedicated to finding, developing and commercializing technologies that provide clean, economical, practical and sustainable alternative energy solutions. The cornerstone of the company's technology is the Bixby Process, an energy conversion system that creates natural gas by superheating coal without burning it. According to the U.S. Department of Energy, utilities that run on synthetic natural gas produce up to 65 percent fewer carbon emissions compared to those that burn coal.

The Bixby Process is a trademark of Bixby Energy Systems, Inc. All other trade names are the property of their respective owners.

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