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Green Plains Renewable Energy and BioProcess Algae to Break Ground on Phase II of Algae Project

Iowa Power Fund Board Gives Preliminary Approval on Additional $2.0 Million Matching Grant

OMAHA, Neb., Jul 20, 2010 (GlobeNewswire via COMTEX News Network) -- Green Plains Renewable Energy, Inc. (Nasdaq:GPRE) and BioProcess Algae LLC today announced plans for Phase II of its Grower Harvester (TM) algae project located at Green Plains' Shenandoah, Iowa ethanol plant. Construction on Phase II is set to begin in the next two weeks with plans to scale the technology 20 times larger than the initial Phase I of the project.

"During Phase I, BioProcessAlgae has successfully demonstrated the scalability of the technology with a 40 times increase in growing volume from bench scale reactors to an industrial setting at our ethanol plant in Shenandoah, Iowa," said Todd Becker, President and Chief Executive Officer of Green Plains Renewable Energy. "We have experienced 100% uptime since inoculation in October 2009 and continue to harvest algae on a daily basis. With the positive results we have achieved in Phase I, we will commit additional resources and expertise to rapidly build the next phase of this exciting project. Our vision remains the same of providing a solution to sequestering industrial carbon dioxide while producing a high quality feedstock for fuel and feed."

"We are seeing good carbon dioxide to algae conversion rates and solid productivity from our Grower Harvester technology," stated Tim Burns, Chief Executive Officer of BioProcess Algae, LLC. "Phase II will build on Phase I efforts to optimize growth of algae in our reactors through improved utilization of light, more efficient carbon dioxide absorption and enhanced dewatering and water re-use. Phase II will also allow for robust verification of growth rates, energy balances, and operating expenses, which we consider to be some of the key steps to commercialization."

"We are also excited to announce that the Iowa Power Fund Board of Directors has unanimously voted in favor of awarding the project an additional $2.0 million matching grant subject to final negotiations," added Becker. "This is the first time that the fund has participated in a second round of funding and we truly appreciate the vision and commitment of the Iowa Power Fund and the leadership of Iowa Governor Chet Culver. If we achieve our goal of commercializing this technology, it will not only bring jobs to the State of Iowa, it will put Iowa on the cutting edge of providing a high quality feedstock to potentially reduce our country's dependence on foreign sources of oil."

BioProcess Algae's Phase II facility will be co-located with the Shenandoah ethanol plant and linked to the plant's carbon dioxide and waste heat for its feedstock. The expansion is expected to cost $4.5 million and is scheduled to be operational by the end of 2010. The cost of the Phase II project will be shared by the joint venture partners and the matching grant provided by the Iowa Power Fund.

About Green Plains Renewable Energy, Inc.

Green Plains Renewable Energy, Inc. (Nasdaq:GPRE) is North America's fourth largest ethanol producer, operating a total of six ethanol plants in Indiana, Iowa, Nebraska and Tennessee with annual expected operating capacity totaling approximately 480 million gallons. Green Plains also markets and distributes ethanol for four third-party ethanol producers with annual expected operating capacity totaling approximately 360 million gallons. Green Plains owns 51% of Blendstar, LLC, a biofuel terminal operator which operates nine blending or terminaling facilities with approximately 495 million gallons per year of total throughput capacity in seven states in the south central United States. Green Plains operates grain storage facilities and complementary agronomy and petroleum businesses in Iowa, southern Minnesota and western Tennessee.

About BioProcess Algae, LLC

BioProcess Algae LLC is a joint venture between Green Plains Renewable Energy (Nasdaq:GPRE), water filtration group CLARCOR Inc. (NYSE:CLC), BioProcessH2O LLC and NTR plc, the international renewable energy group, builds and runs green energy and resource-sustaining businesses. BioProcess Algae was created to commercialize advanced photo-bioreactor technologies for the growing and harvesting of algal biomass.

Safe Harbor

This news release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Such statements are identified by the use of words such as "anticipates," "estimates," "expects," "will,"

"predicts," "intends," "plans," "believes," and other words and terms of similar meaning in connection with any discussion of future operating or financial performance. Such statements are based on management's current expectations and are subject to various factors, risks and uncertainties that may cause actual results, outcome of events, timing and performance to differ materially from those expressed or implied by such forward-looking statements. Green Plains may experience significant fluctuations in future operating results due to a number of economic conditions, including, but not limited to, competition in the ethanol and other industries in which the Company competes, commodity market risks, financial market risks, counter-party risks, risks associated with changes to federal policy or regulation, and other risks detailed in the Company's reports filed with the Securities and Exchange Commission, including its Annual Report on Form 10-K, as amended, for the year ended December 31, 2009 and in the Company's subsequent filings with the SEC. Green Plains assumes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. The cautionary statements in this report expressly qualify all of our forward-looking statements. In addition, the Company is not obligated, and does not intend, to update any of its forward-looking statements at any time unless an update is required by applicable securities laws.

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