



## Energy Group, Total, Makes Investment & Initiates Joint Development Agreement with Renmatix

- *Total invests in Renmatix – Takes equity and Board seat in Philadelphia based licensor of supercritical hydrolysis technology for conversion of biomass into economical cellulosic sugar*
- *Companies complete Joint Development Agreement to initiate distinct R&D programs to process selected lignocellulosic biomasses into sugars for use in Total's target biobased products*

**Philadelphia, Pennsylvania—March 03, 2015** — Renmatix, the leader in affordable cellulosic sugars, announced an investment by the New Energies Division of Total, and the signature of a joint development agreement (JDA) between Total [NYSE: TOT] and Renmatix. Under the agreement, Renmatix and Total will utilize Renmatix's proprietary Plantrose process with specific feedstocks to extract sugar for use in production of biobased products of interest to Total. In concert with the investment and R&D projects, Total also joins the Renmatix Board of Directors.

Existing Renmatix investors, including BASF and Kleiner Perkins Caufield & Byers, join Total in the initial tranche of this Series D fundraising.

“Renmatix's technology to extract second-generation sugars from biomass has the potential to significantly benefit cellulosic sugars economics and is one more milestone in Total's efforts to develop sustainable and profitable biomolecules for products of interest to Total,” said Bernard Clement, Senior Vice President, Total New Energies.

The patented Plantrose process uses supercritical water to reduce costs in conversion of biomass to cellulosic sugars, the critical intermediary for second generation biofuels and biochemicals. With faster reactions and no associated consumable-expenses, Renmatix's supercritical hydrolysis economically enables a multitude of renewable process technologies to address the market needs for 'high volume, low cost, broadly sourced' cellulosic sugars that persists today.

“Having a global oil and gas major like Total join our ranks signals the important role cellulosic sugars play in enabling growth of the bioeconomy, and the transformative impact of Plantrose technology. Our licensing business model allows us to work with the pace-setters of the chemical, forestry, and fuels industries – namely BASF, UPM, and now Total,” said Renmatix CEO, Mike Hamilton. “Total's investment, partnership, and leadership are integral links in helping Renmatix

redefine the economics of second generation sugars that will fuel profitable biorefineries.”

## About Total

Total is one of the largest integrated oil and gas companies in the world, with activities in more than 130 countries. Its 100,000 employees put their expertise to work in every part of the industry – exploration and production of oil and natural gas, refining, chemicals, marketing and new energies. Total is working to help satisfy the global demand for energy, both today and tomorrow. The Group holds majority stake in SunPower, a world leader in solar energy, and an approximately 18% stake in Amyris, an integrated renewable products company. Additionally, Total is actively engaged in a number of renewable R&D projects. [www.total.com](http://www.total.com)

## About Renmatix

Renmatix is the leading technology licensor for the conversion of biomass into cellulosic sugar, an enabling feedstock for petroleum alternatives used in the global biochemical and biofuels markets. The company’s proprietary Plantrose® process challenges conventional sugar economics by cheaply converting cellulosic biomass – from wood waste to agricultural residue – into useful, cost-effective Plantro® sugars. Plantrose supercritical hydrolysis technology deconstructs non-food biomass an order of magnitude faster than other processes, and enhances its cost advantage by using no significant consumables. Renmatix is privately held, with a world-class technical center in Pennsylvania and production operations at the Integrated Plantrose Complex (IPC) in Georgia. [www.renmatix.com](http://www.renmatix.com)