

Renewable Manufacturing Gateway (RMG) Presents at DUG East Conference

Aither Chemicals provides compelling case for ethane use in the region

Pittsburgh, PA. – Steve Adelkoff, RMG President and Aither Chemicals Director and CFO gave a well-received talk at the Developing Unconventionals East (DUG) conference at the David L. Lawrence Convention Center in Pittsburgh, PA. Sponsored by Hart Energy, DUG is the largest conference addressing the unconventional oil and gas business emanating from the Marcellus and Utica shale plays in the Mid-Appalachian region of the US. The conference attracted upwards of 3000 attendees representing all aspects of the industry – E&P, midstream, pipeline, and downstream users.

Mr. Adelkoff was a participant on a panel entitled "Appalachian Economics: Liquids and Liquidity", which addressed the challenges and rewards of the "wet" gas region of the Marcellus and Utica. The shale produces gas rich in natural gas liquids (NGLs) - heavier gaseous hydrocarbons such as ethane (C_2H_6), propane (C_3H_8), normal butane (n- C_4H_{10}), isobutane (i- C_4H_{10}), pentanes and even higher molecular weight hydrocarbons. The key to optimal exploitation of this gas reserve is to monetize the NGLs freeing the use of natural gas containing primarily methane for energy use. Mr.Adelkoff's thesis is that the huge quantity of natural gas in Mid-Appalachia will provide some of the least expensive energy in the world and form the basis for the revitalization of industry in this region.

Mr. Adelkoff presented the case of Aither, an ethane catalytic cracking technology and RMG client, with significant technical and economic advantages compared to traditional steam cracking. Ethane will be in over supply from the local shale gas and no local demand currently exists. Building a local cracker retains the value of ethane within the West Virginia/Pennsylvania/Ohio region, instead of piping it to other areas such as Canada and Gulf Coast.

About RMG

RMG is a nonprofit organization whose mission is job creation for the underemployed and unemployed in the clean technology, renewable and alternative energy industries in blighted areas of Northern West Virginia, Western Pennsylvania and Eastern Ohio. RMG advises with respect to project development, project finance, capital markets



strategies and introductions, business planning, commercialization, marketing, sales and strategic growth. For more information please visit <u>www.renewmfg.org</u>



Aither has a proprietary, scalable technology to crack ethane and convert it into other products. Aither's technology was developed to take better advantage of ethane from shale gas, and to simultaneously lower the cost of producing ethylene, acetic acid, ethylene derivatives and/or acetic acid derivatives and other chemicals and plastics. Unlike steam cracking, which uses heat and steam to crack ethane, Aither Chemicals' process is a catalytic cracking process that uses 80 percent less energy and produces 90 percent less carbon dioxide (CO_2) output.

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