

Impactful Interaction – Genifuel

EDO helps small businesses start, grow, relocate, or diversify. EDO has helped thousands of companies in our region and beyond with the goal of expanding the economy's technology sector and creating high-value jobs.

Genifuel was formed in 2006 to produce energy from wet biomass. After research and development on various approaches, the company pursued the production of methane from algae, including cyanobacteria



In 2008, Genifuel applied for a Technology Assistance Project (TAP) with the Laboratory to utilize the equipment and expertise at PNNL to test certain algae and compare the results to terrestrial biomass.

PNNL scientist, Douglas Elliott worked with Genifuel to fulfill the TAP project requirements. Based on the testing's success, Genifuel expanded its feedstock concept to include a wider range of wet organic materials, such as food processing wastes, biofuel production wastes, animal wastes, and wastewater solids.

As a result, Genifuel began working with the Technology Commercialization Office at PNNL which led to a license to commercialize the technical process for a specific list of feedstocks. Also, Elliott and Genifuel developed a new concept that was filed as a jointly authored invention report with PNNL's Intellectual Property Legal Services group. In addition, PNNL and Genifuel are both members of the National Alliance for Advanced Biofuels and Bioproducts (NAABB), a DOE consortium. Included in the NAABB program is the gasification of wet algae after the extraction of lipids for liquid fuel production, which requires testing and demonstration by Elliott and Genifuel.

James Oyler, President of Genifuel, said, "All of these results came from the initial TAP program at PNNL, demonstrating the very positive outcomes which can be achieved by collaboration between the national laboratories and commercial companies."