

Algae research budget cuts... what now?

Other than long overdue massive budget cuts, nothing has changed at the Department of Energy Algae Program. NAA has asked the DOE Secretary to review algae technologies giving private industry the opportunity to see if any algae technologies could be used in commercial algae production.

While the DOE conducts advanced algal systems listening sessions, commercial algae producers are in commercial production producing various co-products with samples, COA's and tonnage available. Algae does not grow in Washington, DC and funding for NREL, PNNL, Sandia Labs and university algae research grants and lobbyist funding for 2018 is on a major decline.

Algae research grant recipients in the past have stated that all technology hurdles have been met and it's all engineering and scale-up going forward. Private industry and the investment community agree that, after decades of existing taxpayer paid-for algae technologies that continue to sit on shelves collecting dust, we do not need more algae research and lobbyists.

Commercially-minded algae producers and private industry deserves the opportunity to review what we have already paid for. All of these algae technologies sitting on shelves for decades will never have any value in their patents/IP until they are proven to work outside the lab in a commercial environment with a low enough CAPEX for potential licensing opportunities

for the industrial algae production industry. Private industry has not had any opportunities to use any of these technologies due to the restrictions established by algae research programs at universities and the DOE.

Over the last decade, the National Algae Association has received many complaints and has heard the frustrations from past algae research grant recipients and potential grant recipients with the DOE Algae Research grant application fees, costs and restrictions. The federally-funded programs claim that private industry has been precluded from going on properties and doing any due diligence on taxpayer paid for algae technologies due to an outdated Congressional Mandate restricting the funds and access to the projects to universities and government labs. But nobody at the DOE is willing to let Congress know that updating a 1976 Mandate is long overdue. We have been told by the DOE Algae Program/BETO leadership that, if we wanted to change this very outdated Congressional Mandate that only supports algae research at universities and government labs, we would need to hire a lobbyist. It shouldn't take a lobbyist to tell Congress the truth! We believe you need commercial production first, not just an industry made exclusively of government labs, university algae researchers and lobbyists, none of whom have proven that they can commercialize anything.

Allowing NAA, as the business intelligence and trade association for the algae production industry, to review and, if possible, scale the existing technologies will create value in patents/IP and generate new licensing, business opportunities and jobs in the private sector. Algae technologies sitting on shelves in government labs without value or deployment is nothing more than a waste of money spent on storage.

Over the last decade we have noticed DOE Algae Program/BETO employees and algae researchers have no training or experience in addressing the needs of the commercial algae production industry, or requesting excessive fees and licensing fees in making things work outside a lab without any guarantees. Unfortunately, NAA has seen and been involved with the liquidation and bankruptcies of past DOE algae research grant recipient companies that were hand-picked based on unverified grant applications and lobbyist dollars, but not the necessary staffing changes at the DOE Algae Research Program.

"Secretary of Energy Rick Perry announced \$19.7 million in funding to help businesses move promising energy technologies from DOE's National Laboratories to the marketplace. Cooperative development projects between a lab and industry partner(s), designed to bolster the commercial application of a lab developed technology." Private industry believes it can do a much better job in commercial deployment of these algae technologies for algae co-product than government research programs that are allowed to pick winners and losers.

Our position has been once an algae technology can be proven in commercial algae production it will have value to our industry for potential licensing opportunities. With DOE budgets for algae research grants at an all-time low as little as \$5 million for 2018 and with projected cuts at the DOE by 72%, isn't it time to see if any of these algae technologies can actually work in a commercial production environment?

After \$2.5 billion spent on algae research over the last 70 years NAA was formed as the first non-profit algae education and production trade association in the world established over 12 years ago. We are technology neutral and take no interest in any algae technology or IP. NAA wants to create value and licensing opportunities for algae technologies to help our industry. Our only interest is building the commercial algae production industry and helping qualified algae producers in the US and throughout the world. NAA is made up of commercially-minded algae researchers, algae producers, equipment companies and potential investment. We are building the algae production industry, markets and supply channels in the US and throughout the world.

For more information, contact NAA at barry@nationalalgaeassociation.com.