Governor-Elect Tom Wolf

PO Box 22454

Philadelphia PA 19110

Dear Governor Wolf,

The Green Teams of Daniel Boone High School would like to congratulate you on your recent victory in the Gubernatorial Election in Pennsylvania. Excited by your platform of education and the betterment of public schools, we wish to inform you of what our high school's three Green Teams have done and are continuing to do. Just as the future calls for education, it equally calls for research and development in alternative and renewable energies.

We have combined these two vital goals, starting last school year (2013-2014) with the "Go Clean, Go Green, Go Algae" Green Team. Our team gathered algae at a nearby pond in order to populate their bioreactors that they constructed themselves. We learned and then experimented with the techniques of oil extraction from the algae. The collected oil was then converted to biodiesel. Our team then entered in the Lexus-Eco Challenge and went on to become the only team in Pennsylvania to win regionals, and then nationals. The Lexus Eco Challenge is a competition to help spread global awareness about an environmental topic and show how it can be used pragmatically in a business or even household setting. We shared our knowledge with our leaders in Harrisburg. Then we set our eyes on Washington, D.C., presenting before key senators and the Department of Energy.

This school year, the tradition continues with the "Supersonic Hydroponics" and "First Class Biogas" teams, both of which are entering in the Lexus-Eco Challenge. The hydroponics team is focused on the growing of plants in a completely soilless environment. This means that we are doing the research to find and produce the optimal conditions for plants to grow in an all-water environment. Afterwards, a biogas digester was designed and assembled. The reactor’s role is to produce a gaseous mixture through the anaerobic decomposition, the breaking down of materials in an airless environment, of organic material such as food, grass, and manure. Methane, one of the gases produced, is a viable source of renewable energy. All funding came from grants and a portion of the algae team's prize money.

We invite you to come tour our facilities to gain a deeper understanding of what so few schools in the country have an opportunity to accomplish. All three of these projects interconnect in profound ways we wish to demonstrate to you. Hopefully you will be inspired by the work of one high school as we continue to seek avenues to make our message heard in the local, state, national, and international communities. It would be an indescribable honor to present our research to you, and we look forward to the opportunity of hosting your visit!

You can contact our advisors, Mr. Sid Harwood and Mr. Shannon Helzer, at harwoods@dboone.org and helzer@dboone.org respectively. Also, if you prefer, you can call Mr. Helzer at, (610) 582-6100 x 2345.

Sincerely,

(Signature)

(Person with position)