Algae Energy

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The world faces many problems. The most dangerous among these are environmental pollution and energy shortage in general specifically in Egypt pollution problem is considered a strategic problem; Egypt ranked the fifth globally on the pollution index Egypt is 97.30% in the list of countries affected by environmental pollution. The main resources of environmental pollution in Egypt are burning different types of fossil fuels. The Global emissions of carbon dioxide reached a new high of 35.3 billion ton into the atmosphere which leads to global warming. On the other hand, depletion of fossil fuels causes economic and energy problems to the country as well as the field of industry, which isn't currently running 60% to 70% of electrical capacity only. Our research is trying to find alternative source of energy to solve these both problems environmental pollution and energy shortage. Cultivation of microalgae and extraction Biodiesel from it can be a great source for clean energy it is also cheap and algae sucks (co2) during growth so it's environment cleaner. Extraction Biodiesel from algae by being compressed by our device (Exgester) which has been modified to use biomass to extract biogas and Natural fertilizer based on the principle of anaerobic fermentation of organic materials. Exgester also purifies the biogas to separate it from acid gases and increase the heating value of CH4. Finally the outcomes from this project by cultivating about 3%-8% from Egypt desert we will not need diesel from petroleum, Solve the problem of energy and environmental pollution.

Awards Won:
Fourth Award of $500