



Is Algae BioFuel Ready to Hit the US Market?

Posted in [Alt Fuels](#), [Car Tech](#), [Diesel](#), [Emissions](#), [Materials](#) · Published on April 1, 2008

There are many alternative fuels and fuel sources that are all vying to become the next gas giant. Some people champion turning corn or sugar cane or other cellulosic crops into ethanol. Some diesel owners are happy to scrape used vegetable oil to run as fuel in their car. Some government officials and industry leaders would still like to see coal and oil sand converted into gasoline as a means of supplanting foreign oil dependency. However, with each of the above alternatives there are significant hurdles.

In most cellulosic ethanol production a strain is placed on the food crops that are being used that have resulted in higher prices for products like corn. Free, used vegetable oil used in older diesels is a great free alternative fuel if you do not have to drive very far or fast. Vegetable oil does not produce the same horsepower/torque as fossil fuel diesel and can turn an 80-hp Mercedes into a real slow dog. And those who tout the vast supply of coal and oil sand of North America as the next great fuel supply forget that part of the reason we are pushing alternative fuels is to reduce our CO₂ output. Unless all car manufacturers can convert their products to PZEV (Partial Zero Emissions Vehicles) coal-to-fuel and oil sand does not improve our situation.



As a result and after much reading and consideration we see Algae BioFuel, in a closed water system, may be the best alternative we have going right now. Currently there are two means of Algae production that are heading into mass production in the coming months. A closed water system that is fed by the sun and CO₂ coming out of smoke stacks, such as those at power plants. Or an open water system that relies solely on the sun and requires large acreage farms to house the open ponds. Either way algae biofuels require less acreage, zero food crops and zero mining to produce. But of the two there is an added advantage to the Closed Water Algae system.

We discussed in our original article on [Algae \("Pond Goo"\) to BioFuel](#) months ago that by taking in the waste CO₂ from the burning of fuel and using that mixed with the Sun to produce Algae BioFuel you are in effect closing the CO₂ loop. Fuel is burned for electricity, CO₂ is fed into Algae which are harvested for BioFuels that are burned and emit less CO₂ than fossil fuels.

If there is enough BioFuel created to be burned for electricity then the Algae Reactors could in turn be feeding themselves. However, large CO₂ emitters like coal and oil might still be the most productive CO₂ emitters to yield the highest Algae output. There are plenty of power plants with spewing smoke stacks across the globe to feed the Algae that can be converted into BioFuels.

The plucky [Greenies](#) at [EcoGeeks](#) have reported on two production companies that are ready for large scale production of Algae into BioFuel. [Green Fuel Technologies](#) has begun construction on their plant for a Closed Water Algae bioreactors that will be fed from the smoke stacks of a power plant. While [PetroSun](#) has announced that their farm of Algae ponds will be going commercial on April 1st (...*Hope that is not a joke*).

Like BioDiesel and Ethanol it is unlikely that you will be seeing Algae BioFuels at your local gas station any time soon. As it is just ramping up production, and while it does not have the government hand-outs that ethanol has enjoyed and Coal-to-Fuel is trying to acquire, we hope that it can find the strong support in sales that it needs to spread into all areas of the country. With locations like China and their industrial CO₂ waste, a system like Closed Water Algae to BioFuel might really help to clean up the air enough to make it breathable again (*Wait... Was I getting globally optimistic there? Sorry.*).

If we are really serious about improving the air and making a difference in the Environment Algae to BioFuel really appears to be the best alternative so far. It could also be argued, or at least studied, as to whether Algae to BioFuel is more beneficial than Plug-in Electric Vehicles. ...But that is for another article.

Source[[EcoGeeks](#)]