

Funding the Future: BioFuel Technologies

The Department of Energy has fully embraced the trend towards minimizing the utilization of fossil fuels and reducing the size of our carbon footprints. In an effort to propel these efforts forward, the DoE has awarded an unprecedented \$118 million to fund 17 corporation’s biofuel technology projects. While this is an impressive amount, it is anticipated that this is only the beginning. With the window of opportunity still open for companies looking to break into the sector, it is important to understand what biofuel technology is and the requirements for government assistance.

“Many of the deadlines for these programs are approaching, while others have yet to be announced.”

Seventeen companies have already been awarded grants, totally \$118 million, to fund their related projects ranging from pre-pilot, pilot, demonstration, and gen-1.

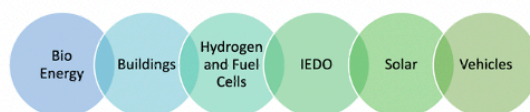
Selectee	Federal Cost Share
Alder Fuels, LLC	\$2,000,000
Algensis Corporation	\$4,987,974
AVAPCO, LLC	\$80,000,000
Captis Air LLC	\$2,000,000
Comstock Inc.	\$2,000,000
Global Algae Innovations	\$3,600,000
Green Plains	\$500,000
LanzaTech, Inc.	\$1,640,286
Lincolnway Energy, LLC	\$453,000
Marquis, Inc.	\$8,547,047
MicroBio Engineering Inc.	\$3,987,199
	\$579,673
Research Triangle Institute	\$2,000,000
Renew CO2, Inc.	\$499,953
University of CA: Riverside	\$2,000,000
University of Utah	\$2,000,000
Viridos, Inc.	\$2,000,000

Wood	• Most commonly used residentially
Biogas	• Mainly composed of methane gas produced through the anaerobic breakdown of biomass
Biodiesel	• Made from the fats and oils from animals and plants
Ethanol	• An Alcohol made from the fermentation of plants (in rare cases also animals)
Methanol	• Essentially the gas form of ethanol
Butanol	• Difficult to produce alcohol similar to gasoline with a higher energy per unit content than ethanol and methanol

Seven types of biofuel as explained by [conserve-energy-future.com](https://www.conserve-energy-future.com)

Under the current administration, the DOE is in a position to award funds to companies whose projects will help meet the current DOE goal “to achieve cost-competitive biofuels and at least a 70% reduction in greenhouse gas emissions by 2030” (Energy.gov, 2023). By using renewable energy derived from living material the carbon emission is drastically reduced, or in some cases, even eliminated without tapping into limited, nonrenewable sources, such as fossil fuels.

A substantial amount has already been dispersed, but it is not too late for companies in any of these stages of development to apply. The following funding opportunities have been announced, five of which are presently in the open window of application:



(EERE, 2023).

Although some of the current deadlines for the aforementioned categories may be approaching within the next two months, it should not be discouraging for those not yet in the pre-pilot phase of development. These are the pioneer funding opportunities within the biofuel industry, and with the DOE deadline of achieving its goal by 2030, there are surely more to come. It is therefore critical to monitor developments in the field and the economic incentives that follow. The future is green.

References

- EERE funding opportunities. Energy.gov. (n.d.). Retrieved February 7, 2023, from <https://www.energy.gov/eere/funding/eere-funding-opportunities>
- U.S. Department of Energy Awards \$118 million to accelerate domestic biofuel production. Energy.gov. (2023). Retrieved from <https://www.energy.gov/eere/bioenergy/articles/us-department-energy-awards-118-million-accelerate-domestic-biofuel>
- Various types and benefits of biofuels. Conserve Energy Future. Conserve-energy-future.com (2022) Retrieved from: <https://www.conserve-energy-future.com/types-benefits-biofuels.php>