



# Clean Agriculture USA

*Cleaner Air  
Over Greener  
Fields*



National Clean Diesel Campaign  
[www.epa.gov/cleandiesel/agriculture](http://www.epa.gov/cleandiesel/agriculture)

The Diesel Emissions Reduction provisions in the Energy Policy Act of 2005 are a significant funding source to bring verified and emerging, cost-effective technologies to communities nationwide.

*“Through EPA’s Clean Agriculture USA program, we were able to replace our old, inefficient tractors. The new tractors are more fuel efficient and burn far cleaner than the old ones, which were nearly 30 years old. They have made a significant difference in improving air quality, which helps our employees and the environment.”*

David McMullin, South Shore Farms  
Payson, Utah



## Clean Agriculture USA: Greener Fields and Cleaner Air

Diesel-powered machines help make American farmers among the most productive in the world. During the last few years, stakeholders representing the agricultural sector, including agricultural engine and equipment makers, have been valuable contributors to the development of new regulations that ensure new engines will be the cleanest in the world.

There is, however, a legacy fleet of more than

2 million agricultural diesel engines in the fields today that contribute significant levels of harmful emissions. They use older diesel engines that produce exhaust containing ozone-forming nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM), or soot, in addition to other air toxics.

Clean Agriculture USA provides businesses in the agriculture sector with tools and resources, funding opportunities, and information regarding best practices to reduce diesel emissions.





## Providing Cleaner Solutions

Clean Agriculture USA helps farmers, agricultural corporations, equipment manufacturers, and other related groups reduce diesel emissions from farm equipment, resulting in cleaner engines and improved air quality. This program identifies proven strategies to reduce diesel emissions, including:

- Switching to cleaner fuels, such as biodiesel, liquid petroleum gas, and compressed natural gas.
- Retrofitting existing diesel equipment with verified technologies.
- Replacing older diesel engines, or entire machines, with newer, cleaner engines.

- Maintaining equipment.
- Minimizing idling.
- Implementing multi-tillage tools.

Clean Agriculture USA also offers support to help implement these strategies. For example, Clean Agriculture USA provides:

- Detailed specifications, performance analyses, and manufacturer data on EPA- and CARB-certified technologies.
- State and local information on funding options and financial incentives.
- Tools and resources, such as emission calculators and case studies from peers and stakeholders.

## Case Studies:

### Miami-Dade County Finds Savings With Repowered Pumps

With funding from the American Recovery and Reinvestment Act (ARRA) of 2009, farmers in Miami-Dade County now have a financial incentive to update their old irrigation equipment with cleaner pump engines. The new Tier 3 engines not only produce fewer emissions but they also use less fuel. By installing the new engines, farmers will reduce average fuel used by 3 to 6 gallons per hour, saving almost 1,000 gallons of fuel per year. Qualified growers receive additional savings, with reimbursements from the county for up to 65 percent of the cost of a new irrigation pump.

### Repowering San Joaquin Agricultural Vehicles

The Air Pollution Control District in San Joaquin Valley received \$2 million to repower 30 off-road agricultural vehicles with new engines that meet or exceed EPA's Tier 3 emission standards. Using ARRA funds, EPA funded this project because of its long-term economic and immediate health benefits for the community. The repowered engines are expected to reduce NO<sub>x</sub> emissions by more than 33 tons and PM by more than 1 ton annually.

Through NCDC, EPA provides grants and innovative financing mechanisms to assist eligible partners in building diesel emission reduction programs.



## For More Information

To learn more about Clean Agriculture USA, visit [www.epa.gov/cleandiesel/agriculture](http://www.epa.gov/cleandiesel/agriculture).



## About the National Clean Diesel Campaign (NCDC)

EPA established NCDC to promote strategies that reduce harmful emissions from America's diesel engines. Through regulatory and innovative approaches, NCDC addresses new diesel engines as well as the millions already in use.



## National Clean Diesel Campaign

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