

# Conservation Programs & Practices for: **Clean Air & Energy**

## About NRCS

The USDA Natural Resources Conservation Service (NRCS) works to protect and conserve natural resources on our nation's private lands.

A part of the U.S. Department of Agriculture, NRCS administers conservation programs funded primarily through the 2008 Farm Bill.

The conservation provisions in the 2008 Farm Bill will affect farmers for years to come. New provisions continue to build on the conservation gains made by U.S. citizens over the past decade. Existing programs have been simplified and new programs created to address high priority environmental protection goals.

In addition to addressing a broad range of environmental goals, the 2008 Farm Bill includes increased financial assistance for new, limited resource and socially disadvantaged farmers.



Contact your local NRCS field office for more information and assistance.

## Contact NRCS:

### Massachusetts USDA Service Centers

Barnstable: 508-771-6476

Greenfield: 413-772-0384

Hadley: 413-585-1000

Holden: 508-829-4477

Pittsfield: 413-443-1776

West Wareham: 508-295-5151

Westford: 978-692-1904

NRCS is working to help farmers identify and install conservation practices that save energy and improve air quality.

Ground-level ozone has been named by the Environmental Protection Agency (EPA) as a harmful pollutant present throughout Massachusetts. Bay State farmers can help reduce emissions that create this harmful pollutant by installing the conservation practices below.

NRCS's national On-Farm Energy Initiative provides funding and technical support for installing cost-effective conservation practices through the Environmental Quality Incentives Program (EQIP).

Funding is available for Agricultural Energy Management Plans (AgEMP), often referred to as energy audits, as well as for implementation of audit recommendations.

## Conservation practices eligible for financial assistance

EQIP offers financial compensation for the cost of implementing the following practices that reduce pollution and greenhouse emissions. An energy audit that meets NRCS standards is required in order to receive financial assistance for farmstead energy improvements.



**Animal Waste Methane Digesters:** An anaerobic digester biologically treats agricultural waste to produce biogas (methane) used for energy production. The process also reduces odors, greenhouse gas emissions and pathogens. The generator set is not eligible for payment.



**Cranberry Auto-start Irrigation Systems:** Automation of cranberry irrigation systems can save up to two to three hours of run time on a frost night. Temperature and moisture sensors trigger the start and stop of the system remotely from a web interface. Growers save water, fuel, mileage and labor.



**Greenhouse Heat Management:** Farmstead energy improvements that include energy/shade screens and horizontal air flow (HAF) systems provide temperature control and heat distribution for energy savings of 30 percent or more for greenhouses.



**Heating Systems:** Farmstead energy improvements that include replacement of inefficient natural gas, propane, or fuel oil unit heaters or boilers for energy savings of 10 percent or more.



**Maple Syrup Reverse Osmosis, Steam-enhanced Pans, and Evaporators:** Farmstead energy improvements to reduce evaporation time includes new or replaced reverse osmosis system, new membrane, steam-enhanced pans, and replacement of inefficient evaporators for energy savings of up to 75 percent.

## NRCS Conservation Programs for Clean Air & Energy

### How are air quality and energy related?

Air quality is inherently related to energy because most energy production methods create emissions that negatively impact our air quality.

Poor air quality has a negative impact on our health, our environment and contributes directly to climate change.

Emissions from agriculture and energy include particulate matter, methane, and carbon dioxide.

When two other common agricultural emissions - nitrogen oxides and volatile organic compounds - are combined, they create another harmful pollutant called ground-level ozone. Ground-level ozone is of particular concern in Massachusetts.

The major sources of harmful agricultural emissions are motor vehicles, electricity, fuel burning, methane, pesticides, propellants, fuels and solvents.

Some natural processes that breakdown manure and fertilizers also produce nitrogen oxides.

### What can farmers do?

Farmers in Massachusetts can take the following steps to reduce emissions and save money:

#### 1. Reduce your energy use.

Request an energy audit, which will identify where energy is wasted and recommend ways to use energy efficiently.

#### 2. Install renewable energy technology.

There are many types of renewable energy; research what type of technology is right for you.

The Environmental Quality Incentives Program (EQIP) provides technical assistance and payments for part of the cost of conservation practices.

#### Environmental Quality Incentives Program (EQIP)

EQIP helps promote farm and forest production by enhancing the environmental quality of soil, water, air, plants and animals.

### Who can apply?

- Individuals, groups or entities who own or manage private farmland, pastureland or forest land may apply. Public lands are not eligible.
- Applicants who produce or sell an annual minimum of \$1,000 of agricultural products may apply.
- There is no minimum acreage requirement to apply for EQIP, however, projects that address significant resource concerns are more likely to receive funding.

### How do I apply?

- Contact your local USDA Service Center to speak to one of our conservation professionals to begin the program application process, which includes:
  - **An energy audit that meets NRCS standards**, which is required when applying to EQIP.
  - **A conservation plan**, which is also required when applying to EQIP. A conservation plan will identify immediate or potential problems resulting in resource degradation and lower production. Developing a plan will qualify you to apply for USDA conservation programs to install recommended practices.
- Information and application forms are available on our website. You will need to file several forms with the USDA Farm Service Agency to ensure that you are eligible for federal programs, including:
  - **CCC-1200**: Conservation Program Application
  - **CCC-931**: Average Adjusted Gross Income (AGI) Certification and Consent to Disclosure of Tax Information
  - **AD-1026**: Highly Erodible Land & Wetland Conservation Certification

### When should I apply?

- Applications may be submitted anytime. All applications will be evaluated periodically in a competitive ranking process as funding becomes available. Ranking criteria for each program is available on our website.

Please call your local NRCS field office or visit us online for more information.