

**Cornell University of New York**  
**2013 NESARE State Program Annual Progress Report (second year of three-year plan)**  
**Anu Rangarajan and Violet Stone**

**Project Title:** Improving farm energy sustainability in New York

**Performance Target:**

- 12 agriculture service providers deliver an educational program about energy conservation and renewable energy opportunities and incentives to an audience of 300 farmers. 30 of these farms undergo farm energy assessments; 24 farms upgrade old equipment to higher efficiency standards; and 9 farms install renewable energy.

**Performance Target Outcomes Reported**

**Actions by Educators**

- 1 incorporated new ideas from project into existing programming
- 1 provided individual consultations to 20 growers
- 14 shared information from the project with farmer and extension faculty, or in newsletters or other media outlets that reached subscription audiences of more than 500,000.
- 3 shared information and resources materials from the project with farmers and extension faculty

**Actions by Farmers**

- 3 Conducted energy audits since attending a 2012 field day; 2 plan to conduct an audit within 1 year
- 3 Upgraded old equipment to make it more energy efficient; 4 plan to upgrade equipment within 1 year
- 3 Installed renewable energy. Installations include:
  - solar panels on barn roof
  - 12V solar battery system for chicken coop lighting and water heating, saving \$50 - \$100/month
  - 3.6KW grid tied photovoltaic system with battery backup for house and 90W photovoltaic with battery storage for chicken coop
- 8 have specific plans to install renewable energy within 1 year. Plans include:
  - Solar panels on the roof of barn roofs
  - Solar off grid power system.
  - Outside wood burning system to heat to home, out buildings and greenhouse
  - Solar or solar-assisted hot water heating for milk house
  - Wind power for electricity
- 2 stated that renewable energy now powers 50% of their home & farm
- 5 stated the New Generation Webinar Series and the Sustainable Farm Energy Series was valuable, even though they are not ready to act immediately

**Additional Outcomes Reported**

6 new/strengthened professional partnerships or collaborations include:

- Violet is discussing collaborative programming opportunities with Chris Callahan, Ag. Engineer at UVM Extension.
- Violet delivered a presentation titled “Get plugged in to Sustainable Farm Energy: Lessons from NY” at the Ohio Small Farms Conference sponsored by Ohio State Cooperative Extension on March 29<sup>th</sup>, 2013.
- Violet was asked to present on Sustainable Farm Energy at the Western SARE 2014 Conference in March 2014 in Alaska.
- Anu delivered a webinar titled “Being Strategic with Grant Writing” to an audience of 24 educators on November 13<sup>th</sup>, 2013.
- Anu presented a webinar titled “Using Evaluation to Improve Extension Programs” on November 3<sup>rd</sup>, 2013 to 32 educators.
- Stronger collaborations with the regional NYSERDA Energy Smart Coordinators who spoke at 3 of the 4 2013 field days.

1 new project started: Preparing half day training on Renewable Energy and Conservation for the NY Soil & Water Conservation District 2014 In-service Training.

### Milestone Activities Conducted in 2013

1. The NY SARE PDP project presented a 4-part webinar series titled “New Generation Energy: Sustainable Power for Your Farm or Homestead”. The series included farmer-led virtual tours and informational tips for saving energy and converting to renewables. Archived links are available at <http://smallfarms.cornell.edu/resources/farm-energy/>
2. After the webinar training, 4 educators submitted proposals and were selected to host sustainable farm energy field days in their own region in Fall 2013. Each educator received a new guide produced by the NY SARE PDP office, titled 2013 Guide to Hosting a Sustainable Farm Energy Field Day. The Guide was written to help ensure consistency and provide pointers in how to schedule the field day, prepare press, recruit co-hosts, create learning objectives, design the agenda and the presentation, and draft a custom evaluation for each field day. The 2013 field day series featured a range of sustainable energy approaches, including solar and wind energy, and small-scale biomass power.

### Program Participants

New Generation Webinar Series: 163 Aspiring Farmer/Farmer/Landowner/Homesteader and 49 Agricultural Educator/Service Provider/Business

Sustainable Farm Energy Field Day Series: 60 farmers and 15 educators

### Assessments of Learning

An evaluation conducted immediately after the field day documented that a total of 14 farmers planned to install renewable energy on their own farms within 1 year and that 3 educators planned to host a workshop or training on sustainable energy.

A follow up poll conducted 9 months after the webinar series and 1 year after the 2012 field day series. Outcomes reported through these surveys are summarized in the outcome section above.

### Outreach about SARE Grant Programs

Information about SARE grant programs and resources was shared with 545 farmers and 199 ag service providers at:

- 3 conferences and 1 meeting:
  - Ohio Small Farms Conference
  - Farm to Market Connection Conference
  - Farm Aid/Home Grown Village
  - NYS Ag Society meeting
- 2 grant workshops, 4 webinars and 4 field days

Additional SARE outreach activities include:

- 3 profiles of SARE grant recipients in the “Northeast SARE Spotlight”, a regular feature in the seasonal Small Farms Quarterly (readership of 27,000 farmers, educators and service providers from PA to ME).
- Advertisements for SARE grant opportunities in the Small Farms Monthly Update, which reaches over 5,000 farmers, ag press, educators and service providers.