

Plans for Sustainable Farm Energy Resources on eXtension





Mission:

To provide timely and practical energy information for agricultural producers and service providers that enhances profitability, conserves natural resources, and promotes vibrant local communities.

eXtension Farm Energy Goals

- Focused on the energy needs of farmers.
- Research based and peer reviewed.
- Collaboration among energy specialists.
- Link users to local and national experts and resources.
- “Launch” farm energy resources on www.Extension.Org in January 2010.

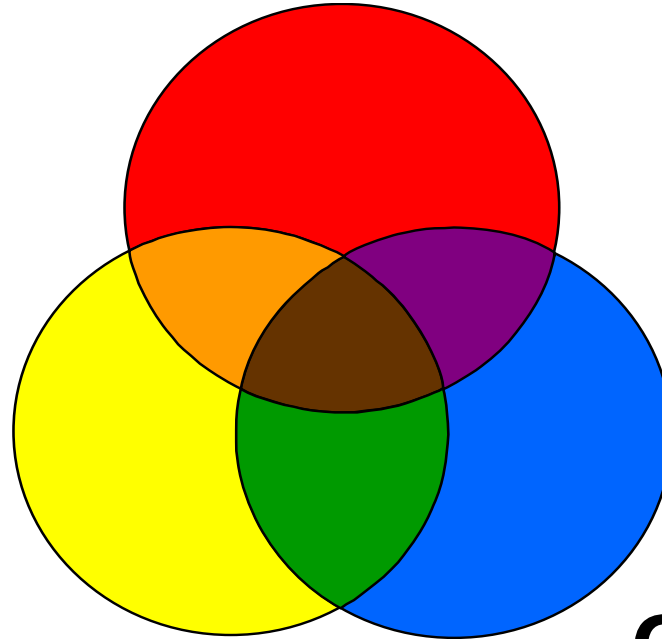
Community of Practice Content Categories

- [Farm Energy Miscellaneous](#)
 - [About](#), Funding, Trends and Emerging Technologies, [Legal](#), Net Metering, Carbon Trading
 - [Sustainability Dimensions](#) ***
- [Farm Energy Conservation and Efficiency](#) ***
 - Building, Equipment, Farm Systems (Inputs + Practices), Food Systems, Greenhouse, Irrigation
- [Feedstocks for Biofuel Production](#)
 - Algae, Animal Waste, Corn, Crop Residues, Grasses and Small Grains, Oilseed Crops, Starch Crops, Sugar Crops, Wood and Woody Biomass
- [Processing Feedstocks into Biofuel](#) ***
 - Pre-Processing, Thermochemical, Biochemical, Chemical, Combustion, Thermodynamic
- [Biogas Energy](#) and [Anaerobic Digestion](#) ***
- [Biomass Energy](#)
- [Ethanol](#)
- [Biodiesel](#) ***
- [Animal Power](#)
- [On-Farm Geothermal Energy](#)
- [On-Farm Hydropower](#)
- [On-Farm Solar Energy](#)
- [On-Farm Wind Energy](#) ***

Sustainable Energy

Profitability

short and long
term



Stewardship

of natural
resources

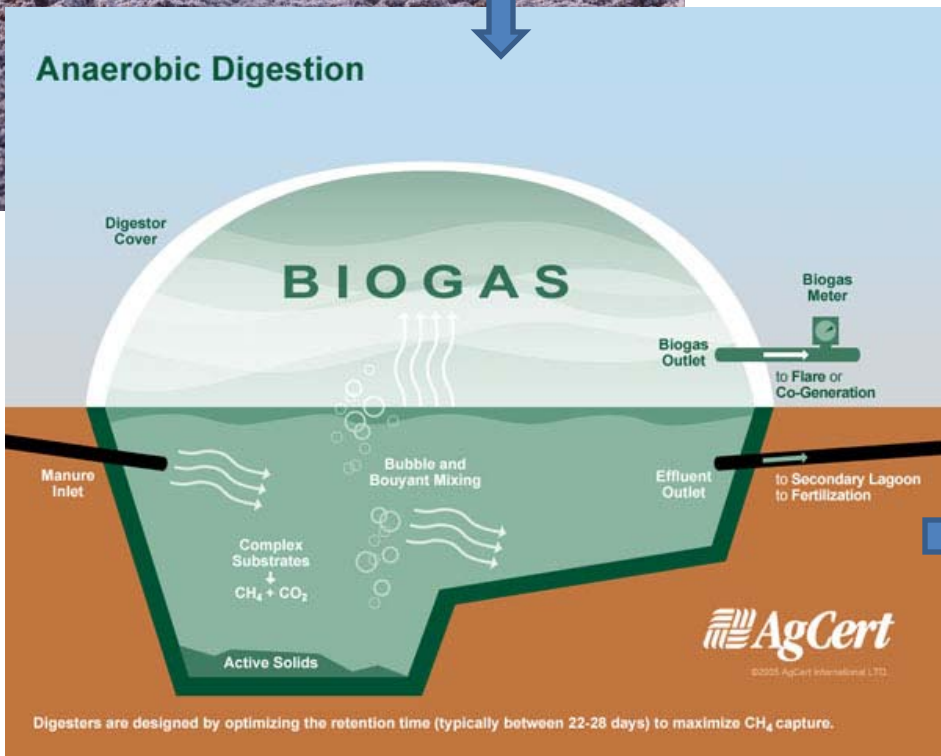
Community

Support for and
connection to
agriculture

Legal, Regulation, Economics



Feedstock Processing Utilization



Active Content Teams

Conservation and Efficiency



Feedstocks / Energy Crops



Processing



Utilization





Biodiesel

Anaerobic Digestion



Combustion

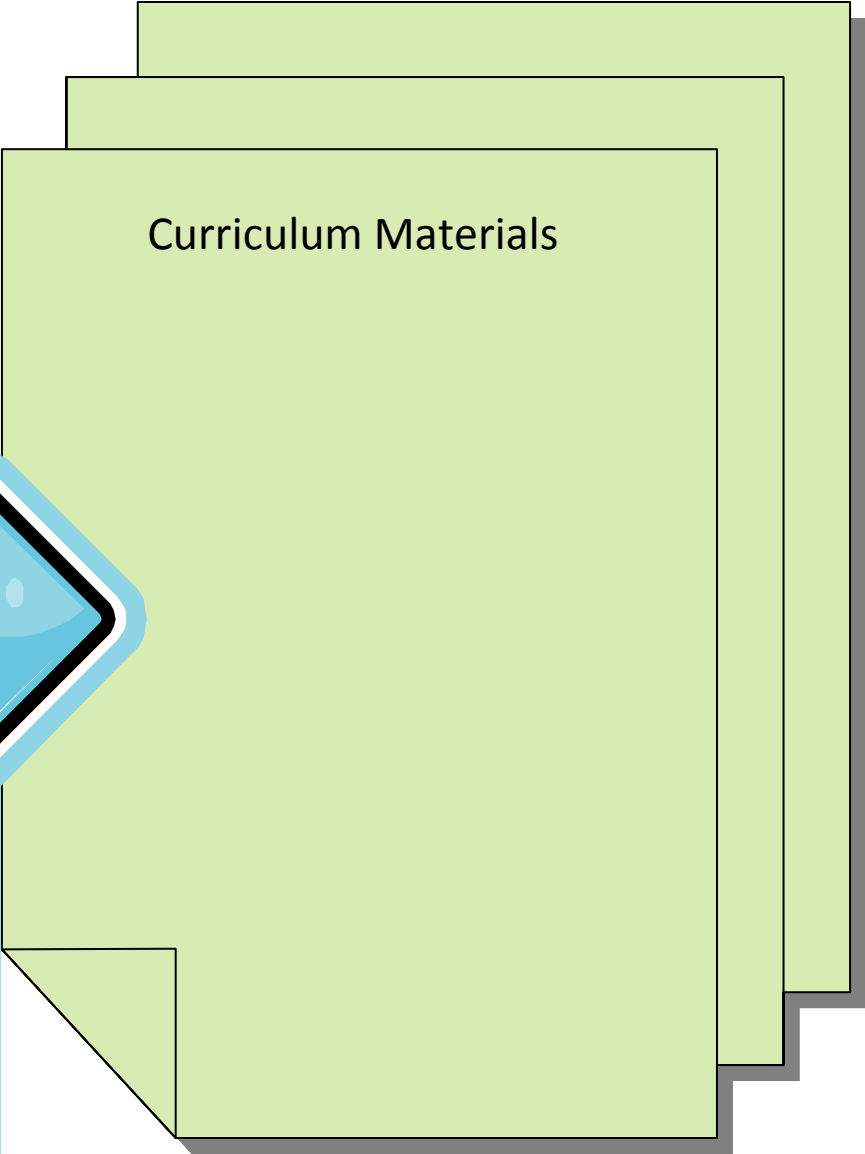


What are the next
Farm Energy CoP
priorities?



On-Farm Wind Power

Master Energy Educator Training



On-farm solar power





Ethanol

On-Farm Hydropower





Farm Energy

Farm Energy is an information source for farmers and agricultural educators interested in all aspects of farm energy--from conservation and efficiency to renewable energy production. [More...](#)

Here are some of our featured articles and activities...



About eXtension

eXtension is an educational partnership of more than 70 universities to help you improve your life every day with access to objective, research-based...

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[Efficiency and Conservation](#)
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[Case Studies](#)
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[Research Links](#)
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Answers from our Experts

[June 27, 2009](#)
[How can I capture the value of energy in manure?](#)

[June 10, 2009](#)
[What is the energy potential from manure produced by livestock?](#)

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This resource area was created by the:
[Farm Energy](#) community



In The News...

[June 25, 2009](#)

[Bio-acoustic Recorders Could Answer Question: Do Wind Farms Pose Risks to Migratory Birds?](#)

[June 19, 2009](#)

[University of Georgia Engineer Answers Questions on Biofuel Research](#)

[June 16, 2009](#)

[Renewable Energy and Efficiency Improvement Loans and Grants Available from USDA](#)

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Articles from our resource area experts.

Introduction to Farm Energy

Last Updated: June 22, 2009 | Related resource areas: [Farm Energy](#)

Have a question?
Try asking one of
our Experts

 Print

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Why Farm Energy?

In the last few years, interest in alternative energy and energy conservation has skyrocketed due to unstable fuel prices and desire to move toward renewable and sustainable energy sources. At the same time, technologies to conserve energy as well as convert feedstocks to biodiesel and ethanol have improved significantly.

Across America farms are generating their own energy using wind turbines, solar panels, or anaerobic digesters, with some selling the excess electricity back to the grid. Other producers are experimenting with on-farm biodiesel and ethanol production, or researching new energy-related crops and business opportunities in anticipation of developing cellulosic biofuel technology and markets.

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Farm energy can generally be divided into:

1. Energy Conservation and Efficiency
2. Renewable Energy

Energy Conservation and Efficiency

[Conserving energy and improving energy efficiency](#) is not only good for the environment--it reduces dependence on fossil fuels and curbs greenhouse gas emissions--but also for the pocketbook, saving farmers money. Fifteen percent of agricultural production costs are energy related, according to the U.S. Department of Agriculture (USDA) – and as energy prices rise, these costs claim an ever-bigger portion of farm budgets. The quickest, cheapest and cleanest way to lower these costs, as well as cut non-renewable energy consumption, is by improving energy efficiency.



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A photograph with a black background. At the top center, a glowing compact fluorescent light bulb (CFL) is suspended by a thin metal chain. Below the chain, several hands of different skin tones are visible, each grasping a link of the chain. The hands are positioned in a way that suggests they are collectively supporting the weight of the light bulb. The lighting is dramatic, highlighting the hands and the glowing bulb against the dark background.

Many Hands
Make Light
Work

Ways to be Involved

The *Wanted* List

(co)Leaders & Team participants

- Collaborate with other specialists!

Individuals

- **Images**
- **Peer Review**
- Links to Resources
- FAQs
- Case Studies
- Research Summaries
- Decision Tools

A large, diverse crowd of people is shown from a high-angle perspective, filling the entire frame. The people are of various ages and ethnicities, and many are looking towards the camera or interacting with each other. A bright yellow speech bubble is overlaid in the center of the image, containing the text "We need you too!".

We need
you too!

<https://people.eXtension.org/account/signup>