



Farm Energy Audits: Challenges & Opportunities

ACEEE Ag Forum

February 22, 2008

Agenda

- Background of farm energy audits
- New developments in the industry
- Opportunities to provide more specialized audits

About EnSave

Since 1991, EnSave has supported the American agricultural sector with innovative energy efficiency and resource conservation programs.



About EnSave

- We have operated energy efficiency programs across the U.S. for utilities, public benefit corporations, state energy offices, and individual farms
- Programs have included audits- performed over 1,500 audits for various farm types

Why would a farm want an energy audit?

- Identify “energy hogs” on the farm
- Reduce energy costs
- Help determine equipment choices
- Help prioritize areas to conserve

What type of farm needs an audit?

- Some types of farms (dairy) typically use more energy
- Some regions have much higher energy costs than others
- Larger farms = more energy use

Traditional Sources for Farm Energy Audits

Electric utility companies/ rural electric cooperatives

Pros: good product, good quality control

Cons: Limited service area; usually normally limited to electric and natural gas usage only

New Sources for Farm Energy Audits

USDA has begun to focus more on energy—recent developments include:

- 2002 Farm Bill (section 9006)— will likely be expanded in 2007 Farm Bill
- USDA's Conservation Security Program offers \$500 reimbursement for energy audits

What else is affecting the market?

- Increased interest in energy due to:
- Additional federal funding
- Rising energy costs
- Emphasis on biofuels and renewable energy

Challenges

- Traditionally, farm energy audits concentrate on electricity
- What about: propane (especially important in poultry industry), diesel fuel, natural gas, gasoline
- Embedded energy in water, fertilizers, transportation

Challenges

- Who can do the energy audits?
- How can farms be sure the energy audits are comprehensive and affordable?

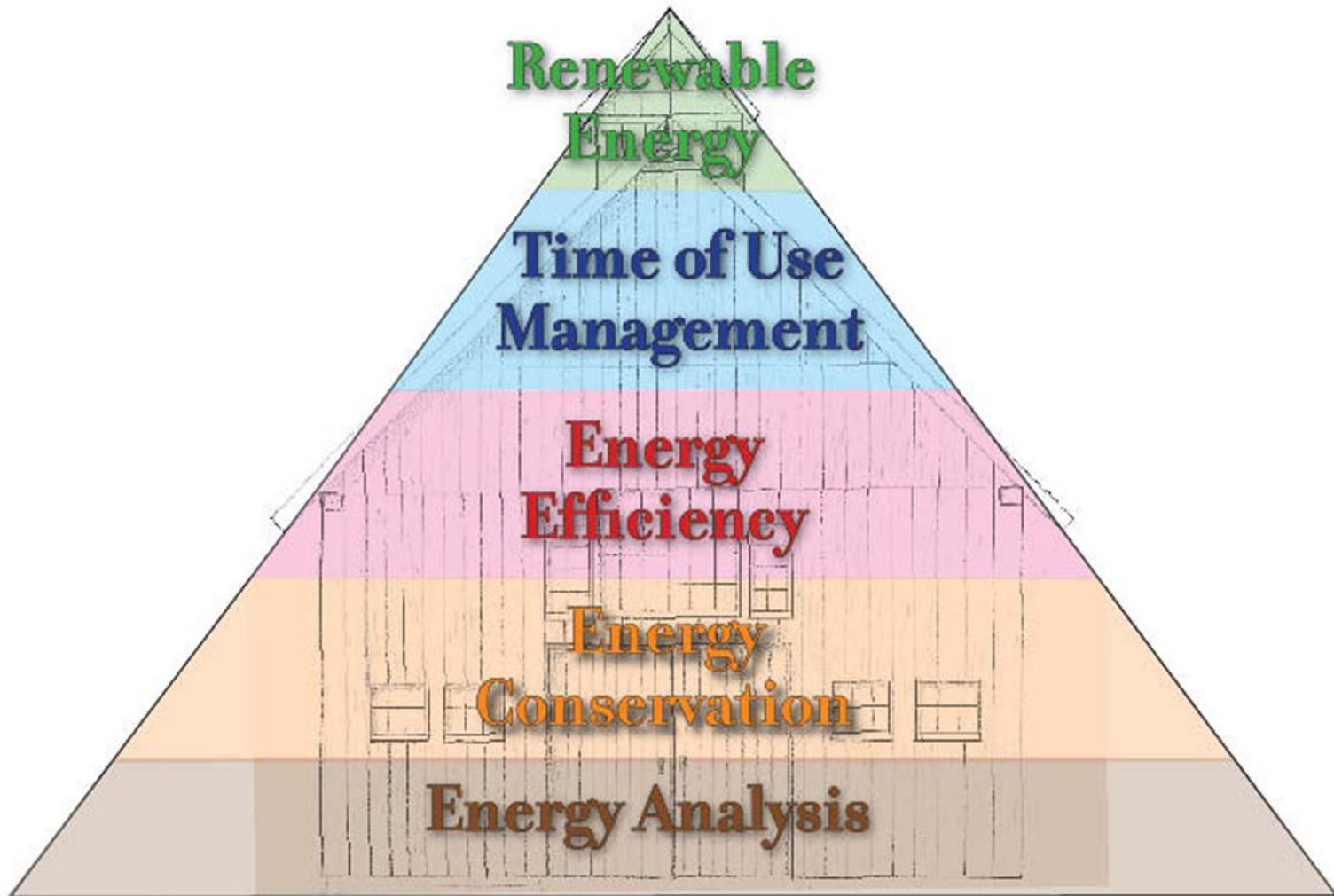
Opportunities

- Farms can become even better energy managers
- Can address issues that are most important to the farm
- Best way to address energy opportunities is through tiered approach- level of service based upon energy savings potential

Benefits of Tiered Approach

- Audits can be standardized, with extra features added to address needs unique to:
 - Geography
 - Size of farm
 - Type of farm
 - Availability of Financing opportunities

Energy Pyramid



EnSave's Services

- EnSave offers three “tiers” of audits in order to serve all needs, and work our way up the energy pyramid
- Level 1: Farmstead only- general recommendations, equipment broken down by broad category
- Level 2: Farm & Field – Detailed recommendations including equipment description & payback
- Level 3: Includes Level 2 and renewable energy opportunities, can be used for 9006 application OR to serve other needs (water conservation, nutrient management, resource conservation)

Thank you!

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