

USDA On-Farm Energy Audits



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Andrea Clarke, PhD
Financial Assistance Programs Division
USDA Natural Resources Conservation Service







Why talk about on-farm energy audits at an AAQTF meeting?

- ❖ *Practicing energy conservation and adopting efficient technologies translates directly to reductions in energy use.*
- ❖ *Less energy (e.g., fossil fuels) consumed translates directly to a reduction in GHG emissions*
- ❖ *Numerous Governors, legislators, and regulators are making major new commitments to efficiency as the “**first fuel**” in their clean energy strategies.*



The Obama Administration, Secretary Vilsack, and Congress have clearly indicated that energy conservation and renewable energy development are high priorities.

USDA On-Farm Energy Audits

- ❑ Historical perspective 
- ❑ Key Forces Influencing On-Farm Energy Audits 
 - ✓ Farm Energy Audit MOU 
 - ✓ Copenhagen MOU 
- ❑ FY 2010 EQIP Agricultural Energy Conservation and Efficiency Initiative
- ❑ FY 2011 EQIP On-Farm Energy Audit / Implementation Initiative 
 - ✓ Conservation practices we can offer/fund
- ❑ Importance of Partnerships 



Historical Perspective of Energy Audits

2002 Farm Bill

- **Title II – Conservation**


NRCS - Conservation Security Program – *seven energy enhancements offered 2004 – 2008 *one of which was an enhancement payment of \$500 for a farm energy audit*


- **Title IX- Energy, Section 9006**

Rural Development - *renewable energy systems and energy efficiency improvements: grants and loan guarantees (RD realized the need for energy audits -- but had no mechanism to fund them)*



Specifically for
energy audits

✓ gave  NRCS the authority to address “energy conservation” in the EQIP program i.e., offer financial assistance for on-farm energy audits.

✓ gave  the authority to award Grants to state, tribal, or local government, land-grant colleges or universities, rural electric cooperatives, or public power entities – to perform energy audits for ag and small business.



Title IX – ENERGY

Section 9007. Rural Energy for America Program

- (1) Grants for energy audits and renewable energy development assistance; and
- (2) Financial assistance for energy efficiency improvements and renewable energy systems.
(this refers to the classic grants and loans to small rural businesses)

Note:

- FY 2009: RD awarded ~\$2.2 million in grants to electric cooperatives, universities, local governments to provide energy audits (18 states-- ~\$100,000 each)
- Cost share: 75% / 25% for audits
- Audits will be offered to ALL potential RD clients – small business, rural industry & ag operations





Key Forces Influencing On-Farm Energy Audits

- Farm Energy Audit Memorandum of Understanding signed Nov. 6, 2009 between USDA's Rural Development and NRCS
- Copenhagen GHG Memorandum of Understanding signed Dec. 15, 2009 between USDA and the Innovation Center for US Dairy



Farm Energy Audit Memorandum of Understanding

Purpose:

To ensure that Rural Development and the NRCS offer interchangeable farm headquarters energy audits through REAP and the NRCS Environmental Quality Incentives Program (EQIP).

MOU also ensures that the risk of duplication of efforts in the two programs is minimized by cross-checking the locations/recipients of energy audits related to both agencies.

See handout

Copenhagen Memorandum



of Understanding



Purpose:

Establish a relationship between USDA and the Innovation Center, and to reflect the commitment of the parties to take steps aimed to create a sustainable future for the dairy industry.

RESPONSIBILITIES:

- 1) Work toward goal of **reducing** the US Dairy Industry's **greenhouse gas emissions by 25 percent by 2020.**
- 2) Accelerate and streamline the process for adopting **anaerobic digesters** by the US dairy farm operators through various USDA programs.

and ...





Copenhagen MOU



Responsibilities (continued)

- 3) Support the **promotion and implementation of energy audits** targeting the dairy sector.

ACTIONS TAKEN by NRCS:

- ✓ *Funding a **Contribution Agreement** to enable work between the Innovation Center and NRCS to promote energy efficiency – primarily on-farm energy audits.*
- ✓ *Funding a **NRCS Liaison Position** “National Energy Efficiency Liaison” to work directly with the Innovation Center for US Dairy to help carry out the items listed in the MOU.*



Further support of the Copenhagen MOU ...

- ✓ ***FY 2010 EQIP Agricultural Energy Conservation and Efficiency Initiative***
 - NRCS Chief committed \$2 million of FY 2010 EQIP financial assistance
 - 29 states offered the EQIP Agricultural Energy Management Plan (AgEMP) Conservation Activity Plan (CAP) – *offered late July 2010.*
 - To-date 244 planned EQIP AgEMP CAP contracts: obligating ***\$446,838 across 22 states***



Energy audit distribution

FY 2010 PLANNED EQIP Agricultural Energy Mgmt Plan Contracts

AL 22	GA 2	OK 2	VA 3
AR 39	ID 4	PA 26	VT 9
AZ 2	MA 4	RI 5	WI 17
CA 3	MD 5	SD 3	WV 15
CO 12	ME 1	TN 23	
CT 11	NY 34	UT 2	Total 244



Value of a Farm Energy Audit?

- **ZERO**, if none of the energy conservation and energy efficiency recommendations are not implemented.
- **IMPLEMENTATION** requires **partnerships with** other Federal and State agencies, local governments, private industry, utility companies, farm organizations, cooperatives, integrators, etc.



Obstacles to implementing recommendations provided?

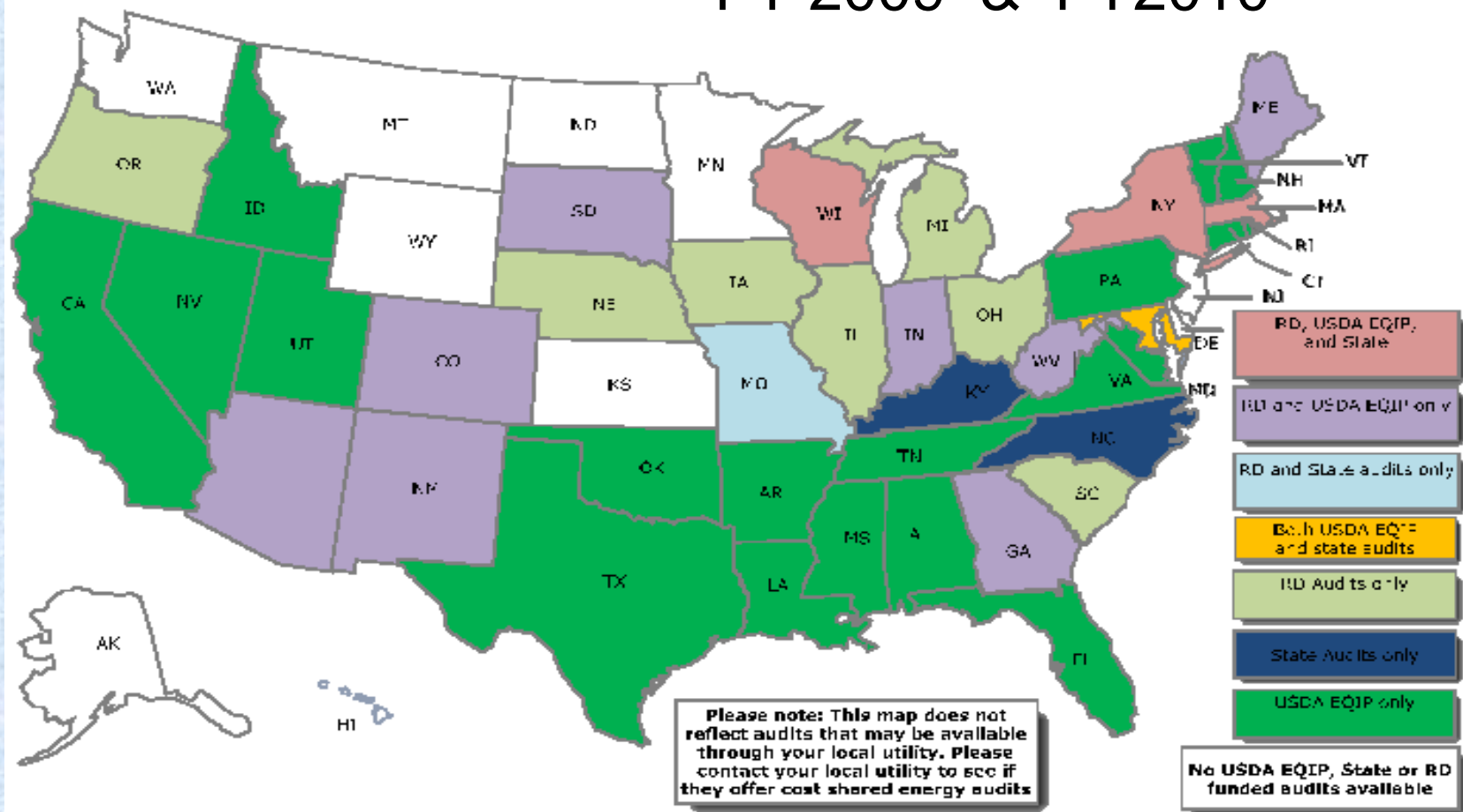
- Many producers not aware of benefits associated with implementing recommendations and potential energy savings that can be achieved with installation of energy efficient equipment and practices.
- Some producers hesitant or unable to absorb financial cost of implementing recommendations.



SOURCE: The Innovation Center for US Dairy -- see their website on-farm energy audits -- why to get them, where to get them, who to contact, etc.

Cost Share Energy Audits Available by State

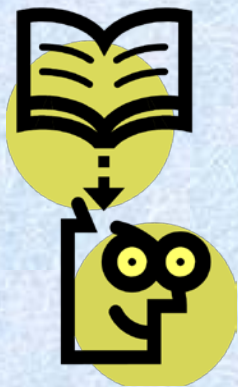
FY 2009 & FY2010



FY 2011 EQIP On-Farm Energy Audit / Implementation Initiative



- NRCS Chief has committed \$5 million of EQIP funds.
- **Purpose:** To fund EQIP AgEMPs (on-farm energy audits) and implementation of recommendations made in completed on-farm energy audits.
- Actively developing an Agency Implementation Plan for incorporating energy into the way NRCS does business



What we can offer ...

- Matrix of conservation practice standards that may affect energy
 - On-Farm Equipment Efficiency Improvements (CPS 374)
 - Headquarters Agricultural Energy Management Plans (CPS 122)
 - Landscape Agricultural Energy Management Plans (CPS 124)
- FY 2011 will be a transition year and therefore we will rely on partners ...



Partnerships Needed for Implementing Energy Audit Recommendations !

- ✓ Encourage ag producers to work with NRCS, Rural Development, and FSA to get assistance in implementing energy saving recommendations.
- ✓ Encourage NRCS & RD staff to provide information to ag producers about state level grants, tax credits, and other types of assistance.



**Ultimate goals: help producers
become more energy efficient and
reduce greenhouse gas emissions.**





Questions?

Feel free to contact me:

Andrea Clarke, Ph.D.

Financial Assistance Programs Division

202-720-5927

andrea.clarke@wdc.usda.gov

