# ACEEE Forum on Energy Efficiency in Agriculture

Exemplary Agricultural Energy Efficiency Programs

Presented by:

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EnSave

EnSave was awarded the 2005 Champion of Energy Efficiency Award by the ACEEE, for leadership and innovation in the design and delivery of energy efficiency programs for America's farms.

#### About EnSave

EnSave supports the American agricultural sector with innovative energy conservation and pollution prevention programs. EnSave provides agricultural producers and food processors with cost-effective ways to reduce operating costs while saving energy and reducing pollution.



## Agenda

• Components of a program/lessons learned

New York Variable Speed Drive Farm Program

Minnesota Farm Energy Conservation Program

• California Multi Measure Farm Program



## **Planning**

#### Initial considerations

- 1. Available funding
- 2. Agricultural sub-sector(s) to serve
- 3. Energy and demand savings goals
- 4. Technologies/services to provide
- 5. Resources people, systems, qualifications etc...
- 6. Program time frame months, years?



#### Market Research

How are agricultural customers identified?

- USDA National Agricultural Statistics Service
- State Departments of Agriculture
- State Departments of Natural Resources
- Farm Bureaus state and local
- Associations



## Market Research/ Creating Partnerships

- Equipment Manufacturers
   Determine the level of market penetration
   Identify the network of dealers
- Equipment Dealers
   Measure the need for a program
   Confirm market penetration
   Determine the number of customers served

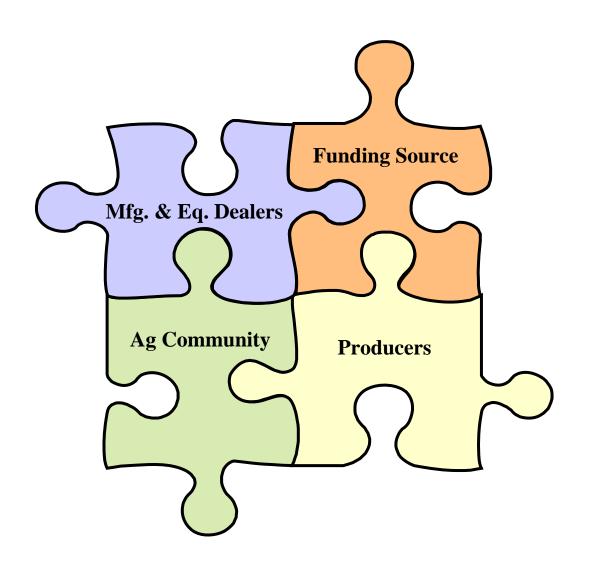


## Market Research/ Creating Partnerships

#### Involve the Agricultural Community:

- Branches of USDA
- Cooperative Extension Services
- Farm Bureaus
- Associations







# New York State Variable Speed Drive Farm Program (funded through NYSERDA)

√ 10 million kWh saved

✓ 2.92 tons of  $NO_x$  emissions avoided

✓ \$1.2 million in first-year energy savings

✓ 572 dairy producer participants



# 2003 Minnesota Farm Energy Conservation Improvement Program

- Cash incentives offered on six measures
- 100 agricultural energy audits completed
- 100 farmers educated about hazards of mercury on the farm
- 2,000 Energy Star CFLs provided, along with education on Energy Star label
- ✓ 4 million kWh saved
- ✓ \$265,000 in first-year energy savings



## California Multi Measure Farm Program

From 2003-2005 EnSave has operated two statewide programs under third-party solicitations for Pacific Gas & Electric and Southern California Edison. Combined results to date:

- Cash incentives offered on five measures
- 167 producers participating to date
- ✓ 7 million kWh saved
- ✓ 1,274 kW saved
- ✓ \$1,050,000 in first-year energy savings

This program will operate in PG&E's service territory from 2006-2008, pending final approval of EnSave's implementation plan.



#### Thank You

Let's talk more about energy in agriculture!

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