





REAPing
Energy Project Success
throughout the Southeast

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July 19, 2011



Tara Adams, a single-mom, poultry producer, Haleyville, AL-
Energy cost of \$14.13 per 1000 pounds broilers was consuming 30 cents of every dollar she was getting for her birds.

Results of \$20,000 REAP Grant:
Annual Energy Use Reduction – 31%
Payback Period – 3 years



Survey of 40 Mississippi REAP Grant Recipients (poultry)

- Annually Saving **6% on Electricity** and **41% on Propane**
- Annual Value of **\$12,000 per Producer**
- Combined Annual Savings of **28.7 Billion BTUs**, equal to **314,000 gallons** of propane



Aquaculture Buoy
Monitors oxygen levels and transmits real time data

Great American Shrimp, Port St. Joe, FL:

300 freshwater acres
producing 200 tons
of Pacific White Shrimp
annually

REAP Project (\$9,700 grant):
Solar oxygen monitoring system with
Computer Controller for Pond Aerators

Annual Energy Reduction: 36%

Payback Period: 5.6 years



Aquaculture Aerator Controller
Automatically powers aerators on or off based on oxygen levels



White Rock Fish Farm Craven County, NC

**\$6,700 REAP grant for solar
powered oxygen monitoring
units with computer controller
for pond aerators**



21% annual energy savings

6 year payback period

Jubilee Farms, catfish producer, Sunflower County, MS:
Installed 1600-ft. deep well to extract 82° water for fish hatchery.
Eliminates the need to heat 60 million gallons per year .



“The system is performing above projections, both in temperature of water we’re getting up and the volume. It’s saving me \$30,000 a year in energy costs.” - Leigh Holland, Jubilee Farms, July 2011

Spring Hill Farm, Pork Producer, Halifax County, VA:

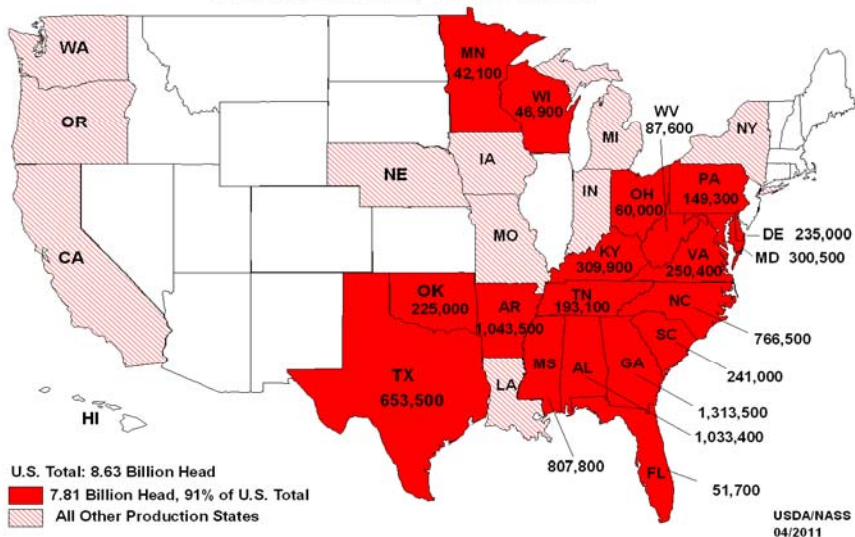
\$3,300 REAP grant for more efficient fans and water heaters in farrowing houses.

Annual Energy Savings: 9%

Payback Period: 2.7 years



BROILER PRODUCTION BY STATE
NUMBER PRODUCED, THOUSAND, 2010





South Alabama Grocers, Ozark, AL, a small, independent, family-owned grocery employing 28 ...



... replaced old inefficient refrigerated display cases.
Annual energy cost savings: \$53,000
Payback period: 6.4 years.

**200 KW solar array
designed for drip
irrigation system of
a Georgia pecan
orchard .**

**\$800,000 project
installed with help of
a REAP grant.**



“REAP is important and helps rural, small businesses and ag producers jump-start solar energy projects that serve as excellent sources for long term electrical power sources in rural areas. Using REAP grants to help drought-proof orchards and croplands is becoming vital to farmers. Not only does solar driven irrigation work well, it increases property value. Solar panels lower operating costs and improve farmers’ bottom line. That translates right into our kitchens.”

Robert E. Green, CEO
Greenavations Power, LLC
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Beasley Forest Products, Georgia



- Hardwood sawmill
- Expansion plans for on-site dry kiln were stymied by high fossil fuel costs
- Grant helped biomass compete: capital costs on par with gas boiler.
- Using wood residues.
- Less waste, more jobs and income.

Wood-Burning Heating System in AR to heat 2 broiler houses ...



Annual reduction in propane consumption: 90%
Payback Period: 3.3 years

Trend in REAP Applications					
State	REAP Applications Received (number)			\$ REAP Funds Requested	\$ REAP Funds Available
	2009	2010	2011	2011	2011
Alabama		17	37	not provided	not provided
Arkansas	6	49	75	4,300,000	862,408
Mississippi		34	62	3,000,000	707,318
Missouri		60	80	2,200,000	656,000
North Carolina	70	120	179	5,800,000	600,000
Oklahoma		14	21	not provided	not provided
Virginia		20	47	2,000,000	641,901
TOTAL		314	501	\$17.3 million	\$3.5 million

Partners Promoting REAP Participation

- State Commodity Groups
- Farm Bureau
- Extension Service
- USDA-Rural Development
- Resource Conservation & Development Councils (RC&Ds)

REAP Mandates Private Investment...

**\$3 in private funds
for every
\$1 in REAP grant funds.**

REAP Creates Jobs

**18.45 jobs are created from each
\$1 million invested in
Energy Efficiency Improvements
by small businesses
and agricultural producers.**

(\$54,200 per job)

Source: Political Economic Research Institute green jobs creation rates derived from U. S. Dept. of Commerce industrial economic output data, 2009.

