

Residential energy efficiency pilot program - Fact sheet

Muscogee (Creek) Nation project - Morris, Oklahoma

The Muscogee (Creek) Nation, based in Okmulgee, Okla. joined with East Central Electric Cooperative on a pilot project through the Take Control & Save program. This pilot consisted of building a new energy-efficient home for the housing division.

As a result of this pilot, the Muscogee (Creek) Nation Green Team was created to ensure all new homes and commercial buildings are constructed using energy-efficient building techniques. The group also applied for and received a \$2.2 million Department of Energy Block Grant to fund energy audits, a recycling program and new and retrofit geothermal installations.

Pilot objective:

- Build a new energy-efficient home for a family of five in Morris, Okla.

Member goals:

- Examine cost savings for building homes more energy-efficient
- Create an energy-efficient home to use as a potential model for others

Completed energy efficiency new construction measures:

- Ground-source heat pump heating and cooling system
- Wet-blown and loose-blown cellulose insulation
- Insulated slab
- TechShield® roof decking (*a product that helps block radiant heat in the roof from entering the attic*)
- Marathon water heater
- California corners (*a construction method that makes it easier for more insulation to be added to the home*)
- Compact fluorescent light bulbs

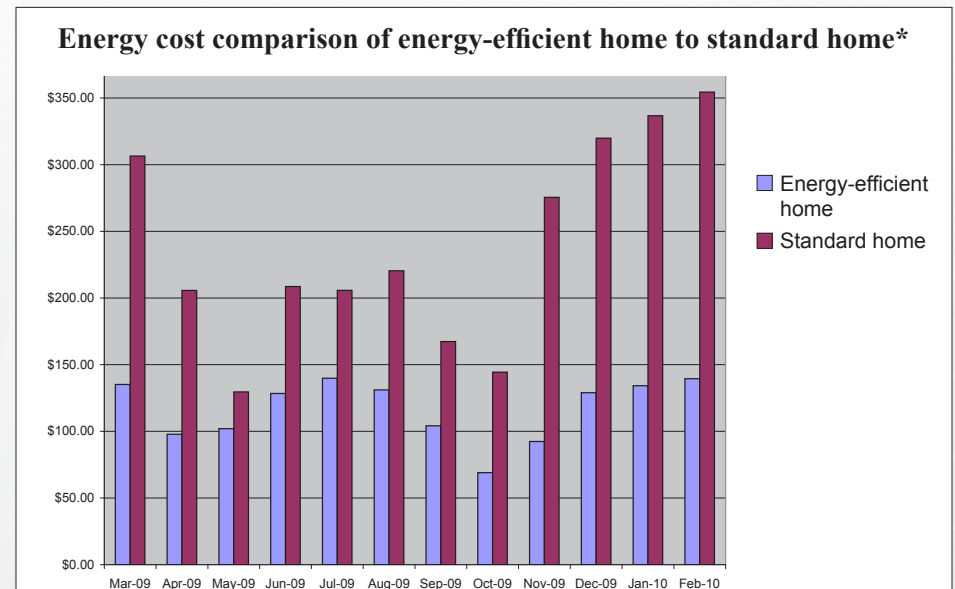
Muscogee Nation home statistics:

- Construction type: Frame
- Exterior: Wood
- Home style: Single family
- Age of home: New construction
- Square footage: 1,900



Energy and cost savings:

- Average monthly savings of \$123 compared to standard home!
- Annual savings of \$1,472 compared to standard home!
- Savings of 51 percent from the standard to energy-efficient home!



* Energy cost of both homes include electricity and propane costs. Energy-efficient home is all-electric except a propane stove; standard home has propane heat, water heat and stove. Both homes are 1,900 square feet. Energy data provided by East Central Electric Cooperative.