ENERGY EFFICIENCY AND CONSERVATION GRANT (Fact Sheet)

Edenton-Chowan Schools has submitted an application for the maximum amount allowable ($200,000) through the North Carolina Energy Efficiency and Conservation Grant program. The federal funds are provided as part of a block grant through the American Recovery and Reinvestment Act (ARRA) and dispersed by the North Carolina State Energy Office. The total amount of ARRA funds allocated to North Carolina is $58.3 million, of which approximately $6.3 million has been designated to be distributed competitively in subgrants to public schools, community colleges and other local public authorities to implement energy efficiency measures.

Requests for proposals were solicited to the 115 public school systems and 58 community colleges to receive assistance under this $6.3 million program. Entities will be notified in March if they have been awarded a grant and for how much. Applicants are required to secure the services of a consultant to provide technical assistance on how to gain access and apply for the energy grant funds, developing required energy efficiency and conservation plans and programs. This consultant also conducted an energy audit as part of their services. The identification and selection of funded projects are based on the results the audit and available funds and not on the preference of the applicant.

Funding areas could include, but are not limited to:

- Retrofit existing facilities to improve energy efficiency;
- Design and operation of energy efficiency and conservation program for buildings and facilities;
- Identification of energy efficient technologies; and
- Renewable energy technologies.

North Carolina's Plan for Distribution of ARRA Grant

- $37.4 Million: Thirty-one designated cities, counties, and the Cherokee Indians
- $7.2 Million: "Non-entitled" municipalities (526) and counties (90)
- **$6.3 Million: Public schools, community colleges, and other local public authorities**
- $0.45 Million: Technical assistance
- $2.5 Million: Energy conservation programs in transportation
- $2.5 Million: Implementation of methane and greenhouse gas technologies
- Remainder in administrative and other costs

Edenton – Chowan Schools
Edenton, NC

John A. Holmes HS

ENERGY EFFICIENCY UPGRADE DESCRIPTION	Total Project Cost ($)	$ TO BE PAID VIA THIS GRANT	$ LEVERAGE (UTILITY CO. & INTERNAL)	$ SAVINGS OF ENERGY PER YEAR	PAYBACK PERIOD (YEARS)[1]	ELECTRICITY ENERGY SAVINGS (kWh/yr)	No. 2 FUEL OIL ENERGY SAVINGS (gal/yr)	Total Energy Savings (MMBtu/yr)	GHG REDUCED (lbs/yr)
Replace single pane windows with thermal double pane windows.	$269,000	$177,200	$91,800	$31,600	5.6	163,763	4,914.0	1,246.8	978,922
Replace T12 fluorescent fixtures with T8 fixtures with electronic ballasts.	$5,617	$1,967	$3,650	$1,315	1.5	8,923	0.0	30.5	10,128
Totals	$274,617	$179,167	$95,450	$32,915	5.4	172,686	4,914	1,277.3	989,049

[1] Payback period is based on Project Cost less the leveraged funds

Chowan Middle School

ENERGY EFFICIENCY UPGRADE DESCRIPTION	Total Project Cost ($)	$ TO BE PAID VIA THIS GRANT	$ LEVERAGE (UTILITY CO. & INTERNAL)	$ SAVINGS OF ENERGY PER YEAR	PAYBACK PERIOD (YEARS)[1]	ELECTRICITY ENERGY SAVINGS (kWh/yr)	NATURAL GAS ENERGY SAVINGS (MMBTU/yr)	Total Energy Savings (MMBtu/yr)	GHG REDUCED (lbs/yr)
Replace T12 fluorescent fixtures with T8 fixtures with electronic ballasts.	$33,024	$9,833	$23,191	$8,377	1.2	90,662	0	309.4	102,901
Totals	$33,024	$9,833	$23,191	$8,377	3.9	90,662	0	309.4	102,901

[1] Payback period is based on Project Cost less the leveraged funds

Edenton – Chowan Schools
Edenton, NC

DF Walker MS

ENERGY EFFICIENCY UPGRADE DESCRIPTION	Total Project Cost ($)	$ TO BE PAID VIA THIS GRANT	$ LEVERAGE (UTILITY CO. & INTERNAL)	$ SAVINGS OF ENERGY PER YEAR	PAYBACK PERIOD (YEARS)[1]	ELECTRICITY ENERGY SAVINGS (kWh/yr)	NATURAL GAS ENERGY SAVINGS (MMBTU/yr)	Total Energy Savings (MMBtu/yr)	GHG REDUCED (lbs/yr)
HVAC Analysis and Optimization	$11,000	$11,000	$0	$22,705	0.5	175,360	396	994.5	245,397
Totals	$11,000	$11,000	$0	$22,705	0.5	175,360	396	994.5	245,397

[1] Payback period is based on Project Cost less the leveraged funds

Summary of Total Project Costs and Savings

ENERGY EFFICIENCY UPGRADE DESCRIPTION	Total Project Cost ($)	$ TO BE PAID VIA THIS GRANT	$ LEVERAGE (UTILITY CO. & INTERNAL)	$ SAVINGS OF ENERGY PER YEAR	PAYBACK PERIOD (YEARS)[1]	ELECTRICITY ENERGY SAVINGS (kWh/yr)	NATURAL GAS ENERGY SAVINGS (MMBTU/yr)	Total Energy Savings (MMBtu/yr)	GHG REDUCED (lbs/yr)
Totals	$318,641	$200,000	$118,641	$63,997	3.1	438,708	5,310	2,581	1,337,348

[1] Payback period is based on Project Cost less the leveraged funds.

Notes:

(1) The information above is a summary of ECMs from energy surveys (example attached) developed with assistance by a technical assistance provider via the State Energy Office.
ECM's energy savings in $ is converted to kWh using the $/kWh per the energy survey. All energy surveys can be provided upon request, and only one example is attached
so as to keep this proposal at a reasonable size (each energy survey is 12 pages long).

(2) Energy savings in kWh converted to BTU using the conversion factor 3,413 BTU / kWh as recommended by the State Energy Office in Q&A for this RFP.

(3) The greenhouse gas (GHG) reductions shown above are based on the State Energy Office's suggested rule-of-thumb which is 1 kWh = 1.135 pounds of GHG; and 1 million BTUs saved = 333 pounds GHG.