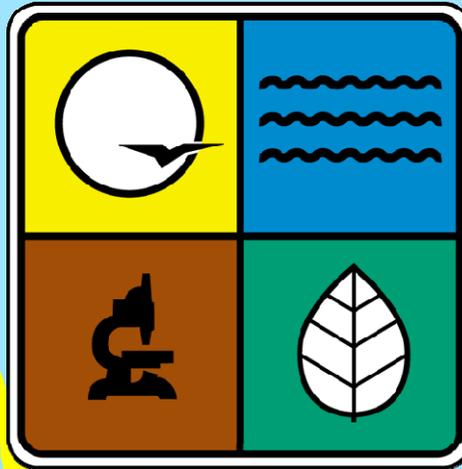


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**MISSOURI  
DEPARTMENT OF  
NATURAL RESOURCES**

Energy Center



## Missouri Energy Center's Energy Loan Program

# Missouri Energy Center

- The Missouri Department of Natural Resources' Energy Center is a nonregulatory state agency that works to protect the environment and stimulate the economy through energy efficiency and renewable energy resources and technologies.

# Missouri Energy Center's Energy Loan Program

## Purpose

- Provide low interest loans to fund energy efficiency improvements in the public sector.

# Missouri Energy Center's Energy Loan Program

## Program History

- Awarded 478 loans since program inception.
- Valued at more than \$80 million.
- Cumulative savings more than \$146 million.

# Missouri Energy Center's Energy Loan Program

## Fiscal Year 2008

- 30 loans.
- Valued at more than \$4.7 million.
- Saving an estimated \$484,805 annually.

# Missouri Energy Center's Energy Loan Program

## Economic Benefits

- Lower utility bills freeing money for other needs.
- Expedites capital improvements.
- Creates jobs in the community.

# Missouri Energy Center's Energy Loan Program

## Eligibility

- Public K-12 school districts
- City & county governments
- State universities & colleges

# Missouri Energy Center's Energy Loan Program

## Typical Projects

- Insulation upgrades
- Lighting upgrades
- HVAC upgrades
- Renewable energy projects

# Missouri Energy Center's Energy Loan Program

## Application

- Processed in a timely manner
- Simple project can be documented with worksheets
- Application process is user friendly
- Complex projects may require a Technical Energy Study (TES)

## Missouri Energy Center's Energy Loan Program

### University of Missouri-Kansas City

- \$1,900,000 loan to upgrade lighting in all campus buildings.
- Projected savings: \$277,000 per year.
- Payback time: 6.9 years.
- Qualified for NOx allowances.

## Missouri Energy Center's Energy Loan Program

### Fair Play R-II School District

- \$224,233 loan award for \$243,104 in efficiency upgrades.
- Lighting, HVAC, insulation and setback thermostats.
- Savings of \$19,041 yearly.

# Missouri Energy Center's Energy Loan Program

## Fair Play R-II



- 400 watt metal halide lighting replaced with T-5 lighting.

# Missouri Energy Center's Energy Loan Program

## Fair Play R-II



- Single pane aluminum frame windows were replaced with double pane windows.
- Window A/C units were replaced with heating & cooling RTU's.

# Missouri Energy Center's Energy Loan Program

## Fair Play R-II



- Exterior view before and after.

# Missouri Energy Center's Energy Loan Program

## Bayless School District



- Replaced original 40+ year old boilers with new boilers.



# Missouri Energy Center's Energy Loan Program

## University City School District



- Replaced original pneumatic controls with DDC system.



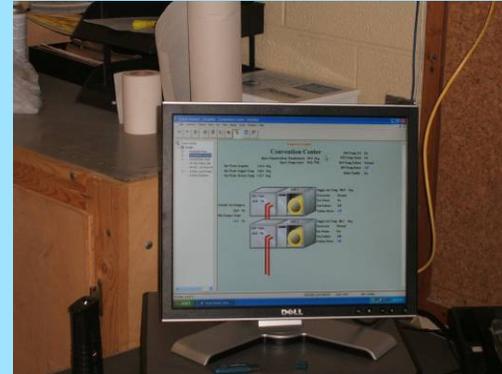
# Missouri Energy Center's Energy Loan Program

## University City School District



# Missouri Energy Center's Energy Loan Program

## City of Sedalia Upgrades



# Missouri Energy Center's Energy Loan Program

## City of Sedalia

Old HVAC



# Missouri Energy Center's Energy Loan Program

## How the Loans Work

- Simplified application process
- Applications are accepted during announced loan cycles
- Typically 90 day turnaround on approval
- Loans are made at a fixed rate.

# Missouri Energy Center's Energy Loan Program

## Interest Rates

- Rates will be set at time of loan award. Rates will be one-half of one percent below the 20-Bond Index interest rates.
- The 20-Bond Index interest rate is published weekly in ***The Bond Buyer***.

# Missouri Energy Center's Energy Loan Program

## Loan Repayment

- Once the project is complete, loan recipients repay the department in semi-annual payments every February 1 and August 1.
- Loans are repaid from the savings that are generated by the improvements
- Loans do not count as debt in school financial records.

## Missouri Energy Center's Energy Loan Program

# Green House Gas Reduction

FY 1997 to present

- Carbon Dioxide 124,132 Tons/year
- Nitrogen Oxides 467 Tons/year
- Sulfur Dioxide 1,015 Tons/year

# Missouri Energy Center's Energy Loan Program

## For More Information

- **Visit our Web page :**  
**<http://www.dnr.mo.gov/energy/financial/loan.htm>**
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