



LOCAL GOVERNMENT ENERGY LOAN PROGRAM

**Alabama Department of Economic
and Community Affairs**

Energy Division

LOCAL GOVERNMENT ENERGY LOAN PROGRAM

**A PUBLIC/PRIVATE PARTNERSHIP
OF THE**

**ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY
AFFAIRS**

ENERGY DIVISION



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Director**

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and

**ALABAMA ELECTRIC COOPERATIVE
(PowerSouth)**

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ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS
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INTRODUCTION

Many government and educational entities are faced with budget restraints and do not have funds to upgrade equipment and/or facilities for energy efficiency. In order to advance energy efficiency for these organizations, the Energy Division of the Alabama Department of Economic and Community Affairs (ADECA) has established a revolving, low-cost energy loan program. Through a public/private partnership with PowerSouth (a wholly owned subsidiary of Alabama Electric Cooperative), the Local Government Energy Loan Program is available to local government entities, K-12 public school systems and public colleges and universities throughout the state of Alabama. All closing costs are included in the loan and it is anticipated that the loans can be repaid from energy cost savings, making them an attractive option for financing energy-efficient facility improvements.

PURPOSE

The Local Government Energy Loan Program enables these public entities to receive a zero-interest loan for energy efficiency improvements, energy audits, and retrofits of buildings. The maximum amount of a loan is \$350,000 for local governments and colleges and universities, and up to \$350,000 per campus not to exceed \$500,000 per school system. This amount includes all closing costs. The loan interest rate is zero percent (0%). The interest rate will not be changed during the life of the loan. A three percent (3%) management fee is assessed for each approved loan.

ELIGIBILITY

- Municipal and County governments, K-12 boards of education, colleges and universities in Alabama are eligible.

CRITERIA

The criteria for participation in the Local Government Energy Loan Program are as follows:

- The facility must be owned by the entity applying for the loan.
- Buildings must include a heating system, cooling system, or both.
- Recipients must agree to repay the loan within ten years with regular interval payments throughout the loan period.
- The energy conservation measure must demonstrate a simple payback period of 10 years or less.
- Each energy conservation measure must have a useful life of at least equal to the estimated payback.
- Recipients shall warrant that all work or construction performed with the proceeds of a loan under this program shall comply with all building codes and standards.

BENCHMARKING

Each building included in the project must be benchmarked using the ENERGY STAR Portfolio Manager program. A Start-Up Guide, Portfolio Manager Training and Preparation Worksheet are included in the application package.

ENERGY AUDITS

Each project will require an energy audit of the buildings, or other facilities to receive retrofits. The audit must identify and specify energy savings and related cost savings that are to be realized as a result of modifying operations and maintenance procedures, or by acquiring and installing one or more energy conservation measures. Simple payback period will factor highly in the approval process. The energy auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative. The cost of engineering may be included in the loan as a cost.

ELIGIBLE ENERGY CONSERVATION MEASURES

Energy efficiency conservation measures eligible under the Local Government Energy Loan Program include the following:

- Interior Lighting retrofits
- Street and sports field lighting
- Traffic signals
- Heat recovery systems*
- Load management systems
- Energy management systems
- Electrical distribution systems (motors, variable speed drives, fans, etc.)
- Infiltration reduction or other building envelope improvements
- Boiler efficiency and central plant improvements
- Upgrading water treatment plants for energy efficiency, energy recovery or both
- Heating, ventilating, and air conditioning (HVAC) equipment
- Renewable energy systems*
- Other cost effective energy retrofits as approved by the ADECA Energy Division.

***Heat recovery systems should be designed with a BTU meter to evaluate recovered energy continuously. Renewable energy systems will need a monitoring function to record energy produced by the system continuously.**

PROGRAM HIGHLIGHTS

- Maximum loan amount is \$350,000 for local governments, colleges and universities, and \$350,000 per school campus not to exceed \$500,000 per school system (until the loan has been fully repaid).
- Term of loan is for ten years or less.
- Loans may be repaid at any time with no prepayment penalty.
- Applications for buildings and complexes must include an energy audit. Any eligible charges for an energy audit may be included in the loan amount.
- The borrower at the loan closing shall submit a Letter of Credit from a commercial

bank or other form of security approved by the ADECA Energy Division. Any cost associated with the Letter of Credit may be included in the cost of the loan.

- PowerSouth will charge the borrower a ten percent (10%) late fee for amounts due on all accounts that are not paid within 30 days of billings.
- Loan recipients must provide the ADECA Energy Division with an Annual Energy Usage Report containing 12 months of energy usage data before project improvements (as part of the Energy Audit) and the first twelve-month period following completion of the project. These reports can be generated using ENERGY STAR's Portfolio Manager program or other industry accepted program. If the affected project area is less than the metered area, an explanation of each must be included in the Energy Audit in order to facilitate the assessment of project performance over the life of the loan.

PROCUREMENT RESPONSIBILITIES

Because the funding source for the Local Government Energy Loan Program has the same requirements for procurement as federal funds and because eligible applicants are subject to the Alabama Competitive Bid and Public Works Laws as well as the Alabama Performance Contracting Act, eligible applicants must be able to document that their bid procedures have been compliant with the applicable laws that govern the process chosen.

The Public Works Law requires sealed bids for projects over \$50,000 and contains advertising requirements specific to counties and cities. The Public Works Law is located in the Alabama Code §39-1-1 through § 39-7-34 for more detailed guidance.

The Performance Contracting Act requires requests for proposals prior to entering into a guaranteed energy cost savings contract. The Alabama Performance Contracting Act is located in the Alabama Code § 41-16-143 for more detailed guidance.

No materials should be purchased prior to receiving loan approval.

DEFINITIONS

Benchmarking – An energy management tool that tracks energy and water consumption of buildings.

Borrower – A participating local government, city or county board of education, or public college or university that has been approved by the ADECA Energy Division to apply for a revolving loan under the Local Government Energy Loan Program. The Borrower must qualify for financial loan acceptance by its local bank and PowerSouth in order to receive the Local Government Energy Loan Program loan.

Complex - Two or more buildings sharing an existing or proposed central heating/cooling, control system or utility energy metering system.

Eligible Facility - Any property owned by a Borrower including buildings, water treatment plants, street and traffic lighting and other facilities determined as eligible by the ADECA Energy Division.

Energy Audits – A report that identifies and specifies energy savings and related cost savings that are likely to be realized as a result of modifying operations and maintenance procedures or by acquiring and installing one or more energy conservation measures in a building, complex, or other facility. The Energy Audit must include at least 12 months of energy billing data and a breakdown of systems where annual energy is used categorically.

Energy Auditor – The energy auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative.

Energy Conservation Measure - A commercially available energy efficient device, replacement or modification of an installation in a building, complex or other facility intended to reduce energy consumption or allow the use of an alternative energy source.

Interest – The current interest rate for the loan program zero percent (0%) for the life of the loan.

Payback Period - A numeric value derived from the total cost of energy conservation measures (including installation, equipment and engineering design) divided the estimated annual energy cost savings. The energy conservation measure must demonstrate a simple payback of 10 years or less.

Public/Private partnership - A joint financial venture between public and private entities for accomplishing a State goal. Under the partnership, each entity is responsible for implementing specified responsibilities according to the financial venture.

Renewable Energy – Resources that are naturally replenished in a relatively short period of time. They include biomass, hydropower, geothermal energy, wind energy, and solar energy.

Reporting Requirement - Each entity funded through the Local Government Energy Loan Program shall submit an Annual Energy Use Report on all projects within 60 days of the close of the 12-month period following completion of the project. Report should contain 12 months of energy usage data before project improvements and the first 12-month period following completion of the project. A report form is provided in the application package, or one can be generated from ENERGY STAR's Portfolio Manager program. Annual reports will be required for the life of the loan.

Local Governments/County Governments, City/County Boards of Education School Systems, and public Colleges and Universities - Eligible participants for the Local Government Energy Loan Program are Municipal and county governments, city and county boards of education and public colleges and universities in the state.

PROGRAM CONTACTS

For additional information on the Local Government Energy Loan Program, you may contact:

Karen Clifton, Program Manager
ADECA Energy Division
P. O. Box 5690
Montgomery, AL 36103-5690
Karen.Clifton@adeca.alabama.gov
334-242-5321

Victor Wyatt
PowerSouth
P. O. Box 550
Andalusia, AL 36420
victor.wyatt@powersouth.com
(334) 427-3228

You may also contact your local electric cooperative.

HOW TO APPLY

Step 1. Identify the building(s) or other facility and energy-using or energy-providing systems to be installed/implemented. Calculate 24 months of energy/water consumption history and the energy intensity usage. These calculations determine the likelihood of energy savings potential. This information is available from your utility service provider.

*(The **ENERGY STAR Portfolio Manager Start-up Guide** beginning on page 14 provides instruction on setting up a Portfolio Manager Account. Portfolio Manager is a helpful tool in tracking energy savings in your buildings.)*

Step 2. Secure a copy of your organization's most recent certified financial statement.

Step 3. Determine the availability of a Letter of Credit from a commercial bank or some other form of security for the loan that is acceptable to the ADECA Energy Division and PowerSouth.

Step 4. Have an energy audit performed by a qualified Energy Auditor of your choosing. If loan is approved the cost of the energy audit may be included in the loan. Use enclosed **Energy Audit Form**.

Step 5. Complete and mail the **Loan Application** with **Energy Audit Form** to:

Ms. Karen Clifton, LGELP Program Manager
Alabama Department of Economic and Community Affairs
Energy Division
P. O. Box 5690
Montgomery, AL 36103-5690

Step 6. You will be notified by the ADECA Energy Division of loan approval. No equipment purchases should be made prior to receiving loan approval.

Step 7. **All energy improvements must be completed before loan closing.**

Step 8. A loan closing date will be set. You must present a Letter of Credit or other form of security approved by the ADECA Energy Division at the closing.

Step 9. Applicant must notify the ADECA Energy Division of any proposed changes

to planned improvements, problems during construction, delays or other deviations to proposed project.

Step 10. Notify the ADECA Energy Division at least 30 days prior to project completion to schedule a monitoring visit by ADECA Energy Division staff.

Local Government Energy Loan Program

ENERGY AUDIT FORM FOR BUILDINGS

This form provides a preferred summary format for the Energy Audit that is required in the Local Government Energy Loan Program of the Alabama Department of Economic and Community Affairs' Energy Division. The audit consists of two parts: A. General Information and B. Energy Audit. **Submit a separate audit for each building targeted for retrofit.** Please complete ALL items on both pages, attach backup calculations and return to the ADECA Energy Division at the address on the next page. If you have any questions contact Karen Clifton at 334-242-5321.

PART A: GENERAL INFORMATION

Section A: Applicant and Building Information

1. Applicant Name:			
2. Building Address:			
3. City:		4. State:	5. ZIP
6. Contact Person:		7. Telephone:	
8. Building Type: _____ (Select code from list :) a. Frame w/siding c. Concrete block d. Block w/brick e. Stone g. Metal or Aluminum f. Concrete PIP h. other		9. Approximate square Footage _____ Gross	_____ Heated

Section B: Energy Auditor Information

Note: Energy Auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative.

1. Name:		2. Telephone:	
3. Firm or Organization:			
4. Mailing Address:			
5. City		6. State:	7. Zip:
8. AL Professional License or Registration Number:		9. Attach Statement of Qualifications for selected Energy Auditor.	

Section C: Certification

The undersigned hereby certifies that the information presented in this audit is a true and accurate representation of the energy characteristics of the applicant's building or complex to the best of the energy auditor's knowledge.

Energy Auditor's Signature and Title (Please type or print)

Date Signed

PART B: ENERGY AUDIT

In this section provide information on the proposed project comparing it to the current energy usage to determine energy cost savings and a simple payback. Loans for recommended measures must be paid-off within ten (10) years.

1. **Date Audit Performed:** _____
2. Briefly, describe the **EXISTING** situation including the type of equipment and fuel that is used.
3. Describe the situation **AFTER** implementation of the energy conservation measures (ECM) recommended. Note: if the ECM saves more than 1 type of energy, show calculations for each type separately.
4. **Energy Conservation Measures (ECM) Summary.** (List the identified ECMs including estimated costs and savings for each.)

Energy Conservation Measures	Estimated Cost	Estimated Annual Savings (\$)	Simple Payback

5. What is the estimated date for completion of this project? _____
- 6 **Energy Savings Data.** Existing conditions vs. Recommended Changes (use whole numbers)

Fuel Type	Electricity		Natural Gas (cc ft)	LP Gas (Gal)	Annual Fuel Cost
	(kW)	(kWh)			
a. Existing					
b. Recommended					
c. Reduction					
d. Increase (or decrease) in maintenance costs resulting from this project: _____ e. Estimated total cost of installing the recommendations: _____ f. Overall Project Payback: $\frac{\text{Total Project Cost}}{\text{Annual Savings}} = \text{Payback}$ years					

Return this form with the application to: ADECA Energy Division
 P.O. Box 5690
 Montgomery, AL 36103-5690
 ATTN: Karen Clifton

START UP GUIDE

Portfolio Manager Training Preparation Worksheet

Part A – Required Registration Information

Establishing a Portfolio Manager account is easy when you have all the information available to you during registration. This worksheet enables you to research and collect the data you will need, so that when you get on-line you will have it all together in one place. You should also file this sheet in an easily assessable place for future reference.

Go to the Portfolio Manager website

- In your web browser, type in: www.energystar.gov
- Click on “Buildings and Plants”
- On the right of the Buildings and Plants page under the heading “Quick Finder,” click on “Portfolio Manager Login”
- When you get to the login page, look to the top right of the page and click on “New User? Register.”

Complete your registration

1. **Username:**
Select a name like your school district in all caps and no spaces, for example. (The username cannot have spaces, dashes, or other special characters.)
2. **Password :**
Choose a password with 8 to 32 characters (letters and numbers only, no spaces)
3. **First Name:**
(The name of the person who will be using the account the most.)
4. **Last Name:**
5. **E-mail:**
6. **Title:**
(Your job title)
7. **Organization:**
(Local Government or Educational Facility name)
8. **Address:**
9. **City:**
10. **State:**

11. ZIP Code:

12. Phone:

13. Select a Verification Question:

This is for obtaining the password if you lose it.

Here are the options you will be given:

- What is your birth city?
- What is your favorite sports team?
- What is your favorite restaurant?
- What is the name of your pet?
- What is your favorite hobby?
- What is your favorite musical group?
- What was the make of your first car?
- What is your favorite movie?

14. Enter Answer:

15. What is the primary business or service of your organization?

("Local Government" or "Education")

16. Which best describes your job title?

Choose from the following:

- Construction/Project Manager
- Energy Manager
- Energy/Environmental Manager
- Facility Owner/Developer
- Facility/Building/Property Manager
- Leasing Manager/Broker/Agent
- Physical Plant Manager
- Staff Architect/Space Planner/Designer
- Staff Engineer
- VP/Dir. Of Construction/Design/Engineer
- VP/Director of Facilities/Agent
- Other: _____ (please specify)

(Most people select "Energy Manager" or "Facility Manager")

17. Indicate your organization's annual activity for each category.

You will need to know your total facilities' square footage.

- Manage/Upgrade: _____ (use total facilities' SQFT)
- Own: _____ (same as above)
- Develop/Build: _____ (unless you know your capital improvement plan in terms of square footage, just use your best guess/estimate of the square footage of new facilities in design and construction)

18. You will not need to complete the optional "Master Account Feature."

Part B – Required Information for Each Facility Space

“Add a Property” Set Up

Click on “Add a Property.”

When you set up your facilities in Portfolio Manager you will have to establish each building as a facility (or “property”). Information needed for each building includes the following:

- Facility Name:
- Address:
- City:
- State:
- County:
- ZIP Code:
- Year Built:

“Add a Space” Set Up

Once you set up the Facility, you need to “add a space.” All schools will be entered as space type “K-12 Schools.” A local government or an administration building should be entered as “Office” (you will see the prompt during the set up process). The “Effective Date” is the first date of the data you are entering (e.g. not the year of construction). Below is additional information required for each space.

1. Space Name:

This is an identifying name for the portion of the facility that you are defining (for example, K-12 School, East Wing, Vocational Module, etc.).

K-12 School applies to facility space used as a school building for Kindergarten through 12th grade students. This does not include college or university classroom facilities and laboratories, or vocational, technical, and trade schools. The total gross floor area should include all supporting functions such as administrative space, conference rooms, kitchens used by staff, lobbies, cafeterias, gymnasiums, auditoriums, laboratory classrooms, greenhouses, stairways, atria, elevator shafts, small landscaping sheds, storage areas, etc.

2. Gross Floor Area:

The total gross floor area is measured between the principal exterior surfaces of the enclosing fixed walls and includes all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc

Also note the following:

- Existing atriums should only include the base floor area that it occupies (such as in two-story buildings where the second floor area is simply open space).
- Covered walkways (solely protection from rain) should not be counted.
- Interstitial (plenum) space between floors should not be included in total.
- If you have portables that are on a separate meter, you don’t have to include them in the count. If they are connected to the main meter with the rest of the structure, then you need to include the square footage.

3. Number of Workers or Students:

This is the total capacity the building is designed for. For instance, the number of students who can be seated in all classrooms at one time. This may also be referred to as the number of

stations, or the number of occupants that the facility was designed for. You only need to update this when you have a building addition, or you are adding portables that are connected to the main building utility meter.

[If this information is not known, you can use the default Value]

4. Number of PC's:

This indicates the total number of personal computers and servers in this space. This can be obtained by contacting the IT department or doing a couple of on site surveys to come up with an estimate. It should be accurate when you submit for an ENERGY STAR recognition opportunity.

[If this information is not known, you can use the default Value]

5. Operating Hours/Week:

This is the average number of hours per week that the facility is at least 50 percent occupied. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed. Operating hours per week must be 30 or greater for K-12 schools, and must not be greater than 168.

[Default Value = 65 Hours per Week]

6. Are there on-site Cooking Facilities?

Yes or No

[Default Value = Yes]

7. What percent of this space is air-conditioned?

Choose percentage

[Default Value = 50%]

8. What percent of this space is heated?

Choose percentage

[Default Value = 100%]

9. How many months is this building in use?

This is the number of months out of the year that the building is open for use. To calculate an energy performance rating, this number cannot be less than 8 or greater than 12.

[Default Value = 12]

10. Is this building mechanically ventilated?

Yes or No

This is the delivering of outside air to the space by using a mechanical system, such as central or window air conditioning unit, economizer, or variable air volume, etc.

[Default value = "Yes"]

"Add a Meter" Set Up

The last step in set up your portfolio to receive a rating is to add a meter and enter the utility data. Portfolio Manager lets you enter both water and energy meters, but only the energy meter data counts toward the rating.

1. Click on “Add a Meter”

You will first have to identify the meter by a name. Some people use a narrative description like “Main Meter.” Others use the account number. And still others use the meter number. However, meters do get changed out from time to time, so that might not be the best option.

2. Add billing data

At this point you should have the bills handy that you want to enter into Portfolio Manager. Select the number of months that you will enter. To get a rating you need at least 12 months of data (utility bills) for each meter or account (such as with natural gas, fuel oil, LPG, etc.). Portfolio manager only requires the billing period and the number of units to obtain a rating. Cost data is optional but often desirable in order to run some of the analyses that Portfolio Manager can do.

3. Rating

Once you click “Save,” you should be able to see a rating for the facility.

4. Report

After you’ve received your rating, request an Energy Performance Report by clicking on the link on the **My Portfolio** page. Make sure to include the Site Energy Intensity in your request. **This should be submitted with your application.**

ANNUAL ENERGY USE REPORT

This program requires that an Annual Energy Use Report be submitted on all projects within 60 days of the end of the 12-month period following completion the project. Provide 12 months of usage data prior to project improvements in the 'Before' category. The 'After' category should contain 12 months of energy usage after the project's completion. Indicate year for each category. A report should be submitted for each 12 month period during the life of the loan. You may either use this form or generate a report from Portfolio Manager.

Grantee (name, address, and specific building/project)

Month 1 "Before" (mm/yy) ____/____

Month 1 "After" (mm/yy) ____/____

Reporting Date _____

Month	Electricity Demand(kW)		Electricity (kWh)		Electricity \$\$		Natural Gas(ccf)		Natural Gas \$\$	
	Before	After	Before	After	Before	After	Before	After	Before	After
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
TOTALS										
Energy Produced										
Comments: (Please report any facility alterations/additions that would affect energy usage or savings reported here)										
Signature of Manager and Date										

Continuation Sheet (if needed)

Month	Propane (Gal.)		Propane \$\$		Other (specify)		Other \$\$ (specify)	
	Before	After	Before	After	Before	After	Before	After
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
TOTALS								
Energy Produced								
Comments:								
Signature of Manager and Date								



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