Leveraging SBA Loan Programs to Finance Building Energy Efficiency Projects

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NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.
Laboratory Snapshot

Only National Laboratory Dedicated Solely to Energy Efficiency and Renewable Energy

• Leading clean-energy innovation for 37 years
• 1740 employees with world-class facilities
• Campus is a living model of sustainable energy
• Owned by the Department of Energy
• Operated by the Alliance for Sustainable Energy
# Scope of Mission

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Working with SBA

Dollars saved through energy efficiency can directly impact the bottom line.

DOE and NREL collaborated with SBA to provide small businesses with easy-to-use information to help make better decisions about energy efficiency.
SBA Loan Programs

**DID YOU KNOW...**

SBA loan programs are available for financing building upgrade and energy efficiency projects:

- 7(a) General Small Business Loan
- CDC/504 Real Estate & Equipment Loan
- 7(a) Express Loan
- SBA Micro Loans
- SBA Low-Interest Disaster Loan
Why Target Small Businesses?

Defined as buildings <50,000 ft², most are <8,000 ft²

Barriers Small Business Owners Face

Many barriers inhibit small business/small building owners from adopting energy efficiency solutions.

The largest barriers include:

- Limited capital
- Higher transaction costs
- Lack of time
- Split incentive obstacles
- Lack of resources and technologies
Small Businesses Save Big!

Two Fact Sheets:

• A Borrower’s Guide to Increase the Bottom Line Using Energy Efficiency
  (http://www.nrel.gov/docs/fy15osti/62960.pdf)

• A Guide to Help SBA Lenders Understand and Communicate the Value of Energy Efficiency Investments
  (http://www.nrel.gov/docs/fy15osti/62959.pdf)
Goals

• **Awareness** that SBA Loan Programs can be used to finance energy efficiency building projects and upgrades

• Point Borrowers and Lenders to appropriate **resources** that can help with:
  o Business case, value proposition
  o Process and timing
  o Energy and non-energy benefits
  o Contractor qualifications
  o Evaluation methods
  o SBA services

• Encourage building owners to **make energy efficiency investments**

• Work with lenders to **understand benefits** of energy efficiency investments
Fact Sheets Point to Available Resources

- ENERGY STAR
- Database of State Incentives for Renewables & Efficiency (DSIRE)
How Can These Resources Help?

- Planning
- Setting efficiency goals
- Benchmarking
- Evaluating efficiency measures
- Economic analysis
- Guidance for measurement and verification and operations and maintenance
Make the Business Case

Investing in energy efficiency can:

- Reduce operating costs
- Lower utility bills
- Increase profits
- Improve indoor environmental quality
- Increase rental income and future value of real estate assets
- Increase marketability of products or services
- Enhance brand image
Additional Information

- Qualifications for auditors and contractors
- Common low- or no-cost energy savings opportunities
- SBA loan program options
- Positive and negative cash flows associated with energy efficiency investments
- Decision tree for energy efficiency upgrades
Low- or No-Cost Energy Savings Opportunities

Common Low- or No-Cost Energy Savings Opportunities

**Envelope**
- Repair broken windows and weather-strip/caulk windows and doors where drafts can be felt or there are visible signs of deterioration.
- Repair and air tighten broken and misaligned exterior doors.
- Add, repair or replace interior shading devices such as curtains and blinds.

**Lighting and Plug Loads**
- If lamps need to be replaced, use lower wattage versions (LEDs or fluorescents) that produce equivalent or superior light output and quality.
- Make sure lights and plug loads are turned off at night, and throughout the day when not needed.

**Service Water Heating**
- Repair any damaged or missing insulation on pipes and tanks.
- Repair leaky faucets.

**HVAC: Heating and Cooling**
- Replace manual thermostats with programmable thermostats, and turn down heating and cooling systems when the building is unoccupied.
- Apply upper and lower limits on heating and cooling temperature set points.
- Clean coils, burners, radiators, filters, and vents for major appliances or building equipment.
- Update and maintain a systems manual with operation and maintenance (O&M) requirements.
- Verify or establish a comprehensive maintenance protocol for HVAC equipment.
- Suspend ventilation during unoccupied period.

**Building Operations**
- Regularly check and confirm that aspects of the building are being operated as intended (window opening/closing, blinds to control solar gains, computer energy management settings) and look for possible operational improvements.

**Building Controls**
- If your building has a centralized building control system, use the controls to automatically adjust operating parameters (such as lighting levels, thermostat settings, ventilation rates) to achieve the intended building performance. Otherwise, use decentralized controls such as vacancy sensors for lighting, programmable thermostats for heating and cooling, and smart power strips for plug loads.

**Policy**
- Establish corporate policies to encourage and manage energy-efficient building operation.

**Consolidate occupants to the extent possible, to reduce the need to condition and power underutilized space (applies mostly to office buildings).**

**Recommission the building regularly (for example, balance air distribution, verify sensor operation, tune up boilers, etc.) to ensure the building equipment is operating at its maximum efficiency.**
Guides Help Lenders:

• Communicate value proposition
• Talk about timing
• Point borrowers to available resources
• Help borrowers understand positive and negative cash flows
• Point borrowers to SBA Partners for business case development
• Understand methods for managing uncertainty in energy savings
• Understand methods for evaluating efficiency projects
Why Should Lenders Care?

- Lower the risk of default
- Enhance customer’s lending experience
- Enhance the brand image of your lending institution
- Secure market share among environmentally concerned customers
- Support missions to deliver services to underserved markets
- Help small businesses meet new building code requirements
Ask us!

SBA Borrowers, Lenders, and Partners can submit questions to:

commercialbuildings@nrel.gov
Thank you!