

Local Technical Assistance Toolkit: Lead by Example

INTRODUCTION

Local governments can advance energy-efficient technologies and practices in the marketplace by promoting energy efficiency in their own everyday operations, a practice commonly known as “Leading by Example” (LBE). Taking actions to improve the energy efficiency of government-owned and -leased facilities and fleets can accrue multiple benefits for both the government and the people it serves. Energy can account for as much as 10% of a typical local government’s annual operating budget (EPA 2009a). As local governments attempt to act with heightened levels of austerity, implementing cost-effective energy efficiency processes and technologies is a proven solution to reduce unneeded spending.

LBE program benefits include:

- Demonstrating leadership
- Reducing energy consumption and costs
- Reducing greenhouse gas emissions and air pollutants
- Fostering markets for energy-efficient products and encourage economic development in local and regional communities
- Offering greater energy price certainty
- Promoting sustainable alternatives to conventional practices
- Providing health and productivity benefits
- Increasing asset value in energy-efficient buildings
- Reducing maintenance costs in energy-efficient buildings

The following are energy efficiency measures governments should consider when deciding how to lead by example:

- Improving energy efficiency in existing and new government-owned and -leased facilities
- Purchasing energy-efficient products
- Improving vehicle fleet efficiency

Key Participants

When developing a LBE program, it is imperative to engage stakeholders in a variety of positions. These participants can play roles of varying importance, but their awareness and participation is critical to create buy-in for the program and sustain it for the long term.

- Mayor or County Executive
- City or County Council
- Energy and Environment Staff
- Local Planners
- Facility Management Teams
- Other Local Governments and Regional Entities

- State Energy Offices
- Utilities and Other Energy Efficiency Program Administrators
- Energy Service Companies
- Nonprofit Organizations

Leading Localities

Arlington, Virginia

The Arlington Initiative to Reduce Emissions (AIRE) was launched in 2007, with the goal of reducing greenhouse gas emissions from county government operations to 10% below 2000 levels by 2012, including through reducing energy use by 2% per year from 2007 to 2012 with energy efficiency retrofits. The effort focuses primarily on county operations, including purchasing clean energy and increasing the efficiency of buildings, vehicles, and other infrastructure, such as traffic signals and street lights. The county is also preparing a Community Energy Plan, which doubles as a climate action plan by use of greenhouse gas emissions as a proxy for overall energy productivity. The Arlington Green Games, a program launched in October 2010 within AIRE, provides assistance and recognition to businesses pursuing energy and water use reductions.

Additional Information: [ACEEE case study](#)

LOCAL GOVERNMENT BUILDINGS

Program Planning

Once a locality determines what actions it wants to take, local governments should adopt a portfolio-wide, systematic approach for energy efficiency in facilities and operations. A comprehensive program ensures greater levels of savings and enables governments to pursue more substantial energy efficiency projects.



Source: EPA ENERGY STAR

A portfolio-wide approach also generates greater momentum for energy efficiency activities throughout the public and private sector, which can lead to sustained implementation and continued savings.

EPA offers a model strategy for energy management in public buildings with tools and resources to help each step of the way.

- Step 1: Make Commitments
- Step 2: Assess Performance
- Step 3: Set Goals
- Step 4: Create Action Plan
- Step 5: Implement Action Plan
- Step 6: Evaluate Progress
- Step 7: Recognize Achievements

The [EPA Local Strategy Guide](#) for energy efficiency in Local Government Facilities and Operations explains these steps in detail and provides useful resources for further information.

Understanding energy use in facilities and operations is essential to program planning. Documenting the baseline energy use of government facilities and identifying patterns of waste strengthens the business case for an LBE program by demonstrating the certainty of energy cost savings. By targeting facilities with the most room for improvement, benchmarking ensures the most cost-effective distribution of resources across governmental agencies. ENERGY STAR offers numerous resources on building benchmarking, including the [ENERGY STAR Benchmarking Starter Kit](#) and its widely used Portfolio Manager tool.

Financing LBE programs is another critical consideration addressed in the planning phase. The State Policy Toolkit section on LBE programs has information on Energy Savings Performance Contracting, which allow government facilities to enter into a performance-based agreement with an Energy Service Company (ESCO), which performs building retrofits that achieve significant energy and dollar savings. More information on financing programs is available at the [Flex Your Power best practice toolkit](#).

Leading Localities

Los Angeles, California

Partnering with the Los Angeles chapter of the Apollo Alliance, the LA City Council passed a “Green Building Retrofit Ordinance” in April 2009. The measure requires all city-owned buildings larger than 7,500 square feet or those built prior to 1978 to be retrofitted to achieve LEED Silver certification or higher. The city is planning to prioritize buildings within or connected with low-income communities, such as libraries and recreation centers. In addition, the ordinance requires the city to further invest in urban communities by establishing training programs for disadvantaged, unemployed, or underemployed workers to enter the “green jobs” economy, and then hiring the new green workforce to perform the necessary retrofits. The program will not only save energy and money via the retrofit projects, but will reinvest within the community by emphasizing local purchasing, green manufacturing, and the “training pipeline.”

- Additional Information: [Overview of the Ordinance](#)

Foundational Policy Support

Local governments can adopt foundational policies to reduce energy use throughout municipally-operated facilities. Policies may target existing building stocks by requiring all government executive agencies to reduce their energy use by a set percentage over a certain amount of time. Many local governments also target new construction by requiring new buildings or new construction (i.e., renovations) to meet energy performance requirements, such as an extension of the building energy code to include greater energy savings measures of a certain level above code, or through the application of an existing energy saving standards, such as those set forth by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) criteria, or the Collaborative for High Performance Schools (CHPS) protocol for K-12 school construction or renovation.

Executive Policies or Agendas

Mayors and county executives can have a great deal of influence over the creation and development of energy efficiency programs. Many local government executives have initiated energy efficiency programs through executive orders and policy agendas.

Salt Lake City's mayor issued an executive order in July 2005 requiring that all public buildings owned and controlled by the city be built or renovated to meet the requirements of LEED Silver certification, at a minimum. A subsequent, related executive order was issued in January 2006.

- Source: [Database of State Incentives for Renewables and Efficiency \(DSIRE\)](#)

City or County Council Resolutions

Many city or county councils have initiated energy efficiency policies via resolutions or bills. City councils in a number of local governments, such as Dallas, Texas; Atlanta, Georgia; and Seattle, Washington, have established policies requiring that new buildings and major renovations be designed in accordance with specific energy efficiency performance standards. In Dallas, for example, the City Council passed a resolution requiring that all new municipal buildings larger than 10,000 square feet be constructed to meet LEED Silver certification standards.

- Source: [DSIRE](#)

City and County Planning Processes

Many cities and counties have developed energy plans that guide decision making on energy-related issues. These plans often include recommendations or requirements to improve energy efficiency in local government facilities and operations. Other local governments have incorporated energy efficiency components into climate change action plans. Local governments have also used other planning documents, such as land use, transportation, and waste management plans, as vehicles for establishing energy efficiency goals in their facilities and operations.

In 2009, the Jacksonville City Office of Sustainability Initiatives announced the creation of the Sustainable Building Program. As part of the program, all new city-owned buildings must meet nationally recognized certification standards. In addition, in city-owned buildings where renovations are being made to more than 50% of the total building square footage, renovations must meet sustainable building certification standards. The buildings must be certified by LEED, Green Globes, or Florida Green Building Coalition. The Jacksonville Environmental Protection Board is also permitted to adopt an alternative sustainable building certification system.

- Source: [DSIRE](#)

Implementation Strategies

When implementing a program, it is critical to leverage the existing resources available to local governments. Communication strategies to engage the community are also important for the long-term success of programs. The [ACEEE State Policy Toolkit](#) section on Lead by Example programs has more information on internal and external strategies for program implementation. Even more information can be found in Section 6.1.6 of the [EPA Local Strategy Guide](#).

Finally, as laid out in the EPA Energy Management steps above, evaluating progress allows for continuous improvement of programs. Information on evaluation, monitoring, and verification of energy savings is also available at the [ACEEE State Policy Toolkit](#).

PROCUREMENT

Local governments may also target the equipment and electronics within their facilities by requiring the purchase of energy-efficient products. Product procurement policies often require offices to procure ENERGY STAR-labeled products. EPA offers [a complete local government strategy guide for energy-efficient product procurement](#).

VEHICLE FLEETS

Governments seeking to improve the fuel efficiency of their vehicle fleets may enact procurement policies that call for a fleet-wide reduction in fuel consumption, or an increase in average miles per gallon (mpg). The National League of Cities provides a policy brief listing [case studies of municipal alternative fuel vehicle programs](#).

RESOURCES

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