

Guide To Community Energy Strategic Planning



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FOR MORE INFORMATION

For additional resources and more information regarding the *Guide to the Community Strategic Energy Planning*, visit the DOE Technical Assistance Program's Solution Center at www.eere.energy.gov/wip/solutioncenter or contact:

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Table of Contents

Introduction to Community Energy Strategic Planning	I-1
What is a Strategic Energy Plan?	I-1
The Importance of Strategic Planning for Energy	I-1
How Does a Strategic Energy Plan Fit into Other Planning Efforts?	I-2
The Community Energy Strategic Plan (CESP) Process and Outcomes	I-2
Step Zero—Getting the Green Light to Get Started	I-3
Tools.....	I-5
Related Resources.....	I-5
Step 1: Establish and Charge a Leadership Team.....	1-1
Identify Effective Leaders.....	1-2
Charter and Direct the Leadership Team	1-5
Tools.....	1-6
Step 1 – Appendix.....	1-7
Tips for the CESP Plan Manager – Project Management & Effective Meetings	1-7
Resources Recommended for More In-depth Guidance.....	1-9
Step 2: Identify and Engage Stakeholders	2-1
Identify Stakeholders to Include	2-2
Engage Stakeholders.....	2-3
Plan to Maximize Stakeholder Value throughout the Planning Process	2-6
Tools.....	2-7
Resources Recommended for More In-Depth Guidance	2-7
Step 2 – Appendix.....	2-8
Stakeholder Engagement Strategies to Consider	2-8
Step 3: Develop an Energy Vision.....	3-1
Identify Guiding Principles and Priorities to Use as a Basis for the Vision	3-2
Create a Focused Vision Statement	3-2
Share the Final Vision with the Broader Community	3-4
Tools.....	3-4
Step 4: Assess the Current Energy Profile.....	4-1
Develop the Scope and Recruit Expertise for the Energy Profile Work.....	4-1
Assess Current Energy Use and Supply	4-4
Identify Potential Future Energy Supply	4-8
Inventory Current Local, State, Regional, and Utility Policies, Plans, Projects, and Programs.....	4-8
Identify Available Human and Organizational Resources	4-9
Organize and Communicate Findings.....	4-10
Tools.....	4-11
Resources Recommended for More In-depth Guidance.....	4-11
Step 5: Develop Energy Goals and Strategies	5-1
Choose Effective Goal Language	5-1
Develop Clear and Measurable Goals	5-2
Identify Strategies for Achieving Goals	5-4
Integrate Input from Stakeholders.....	5-6
Publicize Goals and Strategies.....	5-6
Tools.....	5-7

Step 6: Identify and Prioritize Actions	6-1
Establish a System to Rank Ideas	6-2
Identify Policies, Programs, and Projects to Consider.....	6-3
Rank and Evaluate Options against Goals and Strategies	6-5
Tools.....	6-6
Resources Recommended for More In-depth Guidance.....	6-6
Step 6 – Appendix	6-8
Policies, Programs, and Projects to Consider	6-8
Step 7: Put Together a Funding and Financing Strategy	7-1
Understand Financial Requirements for Different Types of Energy Actions	7-2
Identify Potential Financing and Funding Sources	7-4
Design a Suite of Financial Mechanisms for Proposed CESP Activities	7-5
Tools.....	7-7
Resources Recommended for More In-depth Guidance.....	7-7
Step 7 – Appendix	7-8
Financing Mechanisms to Consider.....	7-8
Step 8: Develop a Blueprint for Implementation	8-1
Develop a Blueprint	8-1
Establish Operational Responsibilities	8-3
Incorporate the CESP into Other Planning and Budgeting Efforts	8-4
Tools.....	8-4
Step 9: Plan to Evaluate	9-1
Establish a Plan for Performance Measurement and Reporting	9-2
Evaluate and Report on the Effectiveness of the Full CESP and Its Components on a Regular Basis.....	9-5
Update the CESP When Necessary to Ensure the Best Results	9-6
Tools.....	9-6
Resources Recommended for More In-depth Guidance.....	9-6
Step 10: Develop, Adopt, and Publicize the CESP	10-1
Prepare a Final CESP	10-2
Have the CESP Officially Adopted	10-3
Publicize the Adoption and Kick Off of the CESP.....	10-4
Plan to Use Effective Communication and Public Relations Strategies to Keep the CESP Visible	10-4
Resources Recommended for More In-depth Guidance.....	10-6



INTRODUCTION TO COMMUNITY ENERGY STRATEGIC PLANNING

This guide introduces the Community Energy Strategic Plan (CESP) approach, a step-by-step process for creating a robust strategic energy plan for your government and community that can help save money, create local jobs, and improve our national security. The guide offers tools and tips to complete each step and highlights examples from successful planning efforts around the country. Local governments and community stakeholders can use the CESP framework to build on initial energy successes, funded through the Energy Efficiency Conservation Block Grant and other efforts, by moving from single projects and programs to a comprehensive, long-term energy strategy that delivers benefits for years to come.

What is a Strategic Energy Plan?

A strategic energy plan is not a static document but rather a long-term blueprint to focus and guide efforts and actions toward a defined energy vision. Such a plan articulates goals, develops strategies and actions to meet the goals, and identifies and allocates resources to assure effective completion of these strategies.

Instead of undertaking decisions on a single-year, as-needed basis, a strategic plan can be:

- **Proactive**-outlines deliberate actions based on clearly articulated government and community priorities
- **Comprehensive**-encompasses a broad scope, based on community priorities, that identifies and pursues high payoff opportunities through coordinated planning and sustained effort
- **Structured**-provides defined and thoughtfully organized guidance through a specific plan for action
- **Long-term**-allows decisions that require multi-year investments or planning; can stage a series of projects to undertake as funds become available
- **Enduring**-establishes a path forward that will maintain relevancy beyond a current administration.

The Importance of Strategic Planning for Energy

State and local governments spend approximately \$8 billion a year on energy to provide public services and meet constituent needs.¹ At the same time, in many buildings, energy costs can be reduced by 20 percent or more through a number of energy efficiency measures and approaches.² Local governments have the potential to **reduce waste and provide savings to taxpayers** by developing a CESP that focuses on energy use in their own buildings and operations (e.g., City Hall, public schools, wastewater treatment plants, streetlights, transportation fleet). For example, after the City of Philadelphia released its *Greenworks* plan, municipal energy use was reduced by 4.9% over just the first two years, avoiding nearly \$4 million in energy costs.³ Particularly in a time of tightening budgets and rising energy costs, developing a CESP can be an important component of good governance, and it can also put governments in a prime position to capture future funding opportunities as they arise, because they have proactively identified their goals and priority actions.

Expanding the strategic energy planning effort to encompass the broader community can lead to a still wider-ranging set of outcomes and related benefits, including:

¹ U.S. Department of Commerce Bureau of Economic Analysis National Income and Product Accounts, Table 5.8.5B: www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=174.

² McKinsey and Company Unlocking Energy Efficiency in the U.S. Economy: www.mckinsey.com/client_service/electric_power_and_natural_gas/latest_thinking/unlocking_energy_efficiency_in_the_us_economy.

³ Greenworks Philadelphia Update and 2012 Progress Report: www.phila.gov/green/pdfs/GW2012Report.pdf.

- **Job creation for the local economy** – for example, since the 2007 adoption of its *Green Vision*, the City of San Jose has attracted 4,000 jobs, and a number of clean tech companies like SunPower, SoloPower, Stion, and Sunwize now call the city home.⁴
- **Greater energy security and influence over energy choices & enhanced potential for public-private partnerships** – for example, as part of its 2008 *Climate Action Plan*, the City of Chicago set a goal to turn to cleaner and renewable energy sources, and as a step toward that goal partnered with Exelon and SunPower in 2009 to develop the nation’s largest urban solar power plant.⁵
- **A cleaner environment and increased livability** – for example, since adopting its *Greenprint* in 2006, the City of Denver has planted 250,000 trees, saved over 260 million gallons of water annually, and increased light rail ridership by 94 percent.⁶

While many players might take part in the development of a community-wide CESP, local governments are in a unique position to lead the process, because they are close to their constituents and understand their needs and interests, play an important role in affecting citizen and business attitudes about energy use, and have significant powers to improve the way energy is used (e.g., policy creation and enforcement, direct financial support).

How Does a Strategic Energy Plan Fit into Other Planning Efforts?

A strategic energy planning effort may stand alone or be an energy-focused subcomponent of a jurisdiction’s master plan or economic development plan. Many jurisdictions also undertake energy planning as part of a broader climate action or sustainability planning effort, which can reduce the perceived scale of the effort and encourage more participation. The CESP process outlined in this Guide can be used and adapted for any of these cases. And however the development of CESP fits into a local government’s other planning efforts, the recommended activities and associated savings should be integrated into the jurisdiction’s budget planning cycle – energy planning and CESP actions will be most effective when integrated into core government functions.

A CESP will also be particularly valuable when coordinated with existing utility, private-sector, regional, and state-level planning activities – complementary policies and activities can facilitate coordination of activities and the leveraging of additional resources.

The Community Energy Strategic Plan (CESP) Process and Outcomes

Undertaking a strategic plan does not have to be daunting if you follow the CESP framework, which focuses on basic steps and builds on the experiences of other successful initiatives. The graphic to the right illustrates this approach and the steps a local government/ community can take to complete their plan. Each step will be discussed in further detail in the chapters that follow, with products from the process that include:

- **Energy Profile:** A profile of the existing local government and/or community energy landscape, including current energy use, policies, programs, and other activities.
- **Final CESP:** A roadmap for the local government/community’s energy future, including the long-term vision, near-term goals and strategies for



⁴ San Jose Green Vision: www.sanjoseca.gov/index.aspx?NID=2737.

⁵ Chicago Climate Action Plan Progress Report, 2008-2009: The First Two Years: www.chicagoclimateaction.org/filebin/pdf/CCAPPgressReportv3.pdf.

⁶ Greenprint Denver Five Year Progress Report: www.greenprintdenver.org/wp-content/uploads/2012/09/GreenPrintReport_FINAL_Spread.pdf.

meeting the goals, and priority actions to accomplish each strategy. It will also include an implementation blueprint, which outlines for each priority action the responsible parties, timelines and milestones, and process for tracking progress, as well as the budget and/or funding strategy.

While the process is presented as a linear step progression, there are cross-cutting threads that are important throughout the CESP development and are referred to often in this guide.

- Contributions from leadership, stakeholder engagement, and effective communication will be critical components at many stages of the process.
- While the process may be endorsed by executive mandate, much of the day-to-day work to implement the planning process is driven by on-the-ground staff –resources will be required throughout, either with internal staff or other professional support. (More on this in Step 1.)
- Engagement and buy-in from stakeholders is key to long-term success – communicating in a way that is clear and well-timed is important. (More on this in Step 2.)
- The best plans will be revisited again and again over time as progress is made and conditions change.

Step Zero—Getting the Green Light to Get Started

Before initiating the CESP process, it is helpful to gain the official endorsement and authorization of a local executive-level sponsor (Mayor, County Commissioner, etc.). This support will provide legitimacy, resources, and public recognition to the process. The support may come in the form of an executive order, legislative action, internal staff directive, or primary issue emphasis on the official’s policy agenda.

Sometimes the desire for a CESP originates from the ground up, and an appropriate executive-level sponsor is not immediately obvious. In these cases, a thoughtful approach to engage and solicit the support of an appropriate executive champion is helpful, and a **CESP Value Brief** is provided for that purpose at the end of this chapter.



1. **Do some preliminary groundwork** – Before approaching an executive, an interested staff person will have to do some preliminary groundwork, including determining the plan’s scope, articulating likely benefits, and estimating the resources needed to complete the planning process itself.
 - **Scope** – Some communities pursue a CESP for government buildings and operations (local government CESP), while others consider also including other key sectors of the community (community-wide CESP), which offers broader benefits while requiring greater resources.
 - **Local government CESP** – Energy planning for government operations will:
 - Include a focus on government buildings, facilities, infrastructure, operations, and transportation.
 - Concentrate on activities for which the government has direct influence – personnel, operations, planning, and budgeting – which means tighter control over implementation.
 - **Community-wide CESP** – A broader plan to also include activities for the entire community will:
 - Expand focus to include energy saving activities across the jurisdiction – can include residential, commercial, industrial, transportation, and other sectors of the broader community.
 - Recognize that, while local government actions can greatly influence, energize, and leverage effective activities in the broader community, the government may have less direct control over these activities in comparison to a government-only plan. If a

municipal or cooperative utility exists in the jurisdiction, planning can include activities that can be delivered through the utility to their ratepayers.

- **Resources** – The scope and level of depth desired will dictate the CESP timeline and budget. Use the **CESP Planning Worksheet** at the end of this chapter to help identify and map out what the planning effort may require. You may need to map out a couple of options to help in identifying the scope of your effort.
 - **Timing** – The planning effort can take anywhere from 418 months, depending upon the scope of your plan and the man hours that can be dedicated at a given time. A model timeline for completing a CESP is provided below, and a template is included with the **CESP Planning Worksheet** that you can manipulate to reflect your own timeframes. Implementation, monitoring, and reporting will then continue through the length of the plan’s time horizon.
 - **Budget** – Every situation will be different, depending on previous planning efforts, scope, community size, extent of stakeholder engagement, and use of outside consultants. Remember that a well-designed CESP can be completed with manageable cost and will help the community achieve important benefits.
 - Ballpark budget estimates for planning range between \$25,000–100,000, though the cost can be significantly less for government-only plan or if substantial in-kind contributions can be found from community partners.
 - While internal staff resources are a key component – developing the plan will require dedicated staff time – it can often be effective to involve external consultants for technical analysis, stakeholder engagement, etc.
 - Funding sources for the planning effort often include internal planning budgets or one-time grant support. Some communities justify salaries for sustainability positions based on the financial savings these individuals will be able to achieve once the plan is in place. Others borrow staff from other departments to achieve the CESP work.
 - Identifying additional funding to implement the CESP’s actions and ongoing evaluation will be discussed in Step 7.
- 2. **Share the value of a CESP** – With this information in hand, as well as information about the value of undertaking a CESP (see **CESP Value Brief** at the end of this chapter), an interested staff person, working with government officials, is now ready to approach executive leadership with an initial proposal to request authorization for the CESP planning effort.

CESP Timeline											
Step 1	Form Leadership Team										
Step 2	Identify Stakeholders	Engage Stakeholders									
Step 3	Vision										
Step 4	Energy Profile										
Step 5					Goals and Strategies						
Step 6					Identify Actions						
Step 7					Identify Financing						
Step 8								Implementation Blueprint			
Step 9								Monitoring Plan			
Step 10								Scope and Develop Final CESP			Adopt & Publicize
Month:	1	2	3	4	5	6	7	8	9	10	

- 3. Get firm commitment** from executive-level authority – this likely will take the form of an executive mandate, either formal or informal, by a top-level government official with the ability to authorize the funds necessary to carry out the planning process. For example, a Mayor, City Council, or County Commissioner may issue an order stating:

“I support the fundamental concept of increasing [this entity’s] use of energy efficiency and renewable energy. Most importantly, I support [this government entity’s] work in engaging the local community, residents, and businesses, in order to increase their own efficiency and efforts to incorporate renewable energy measures. Given these priorities, I authorize the effort of developing a Community Energy Strategic Plan for [this entity].”

- 4. Start planning!** Step 1 presents guidance on building a Leadership Team. Step 0 has already provided a head start – the official(s) who authorized the CESP will likely be the Champion of this process, and the interested staff person who did the preliminary groundwork will likely be the Plan Manager, advocating for and administering the planning process. In addition, the information collected and presented in the CESP proposal can provide the basis for engaging the full CESP Team. (These roles will be discussed further in Step 1.)

Tools

Tool 0.1: CESP Planning Worksheet and Timeline Template :

- [Planning Timeline Template](#) (.xlsx)
- [Planning Worksheet](#) (.docx)

Tool 0.2: CESP Value Brief for communicating the value of CESP to executive leadership and stakeholders, including:

- [Microsoft PowerPoint Template](#) (.pptx)
- [Elevator Speech Guidance](#) (.docx)

Related Resources

- American Council for an Energy-Efficient Economy (ACEEE) Local Energy Planning Practice: A Review of Recent Experiences (*For a survey of existing energy plans and trends*)
<http://aceee.org/research-report/e123>
- ICLEI Planning Page (*For more information on planning efforts focused specifically on climate action, sustainability, and/or climate adaptation*)
www.icleiusa.org/action-center/planning

Side Steps: What if your proposal for a CESP is not approved?

There are a number of reasons why your decision-makers may be hesitant to undertake a CESP at this time. They may include:

- Competing priorities that do not include energy or strategic planning.
- A perception that there is not enough funding to do a full-scale strategic planning initiative or to finance the activities a plan might identify.
- Leadership unfamiliar with designing and implementing plans, or who feel that the expertise to undertake such an effort is not available.

There are still things you can do to maintain momentum toward a brighter energy future. Based on your position and skills, consider how you can influence the activities listed below.

Complete energy-wise projects	Continue to share the value of a CESP
<ul style="list-style-type: none"> • Develop a short-term project plan – which identifies current issues with buildings and other operations and what to do about them – and include energy-saving solutions whenever possible. • Be sure that energy saving is a part of the decision-making process for individual projects such as infrastructure or building improvements and development plans. • Work to assure that comprehensive long-term savings (not just initial cost) is factored into decision making for projects. • If the issue is cost, lobby for policies that have little cost – such as employee energy-saving behaviors. • Recruit others to help keep the energy issue a focus; set up volunteer activities such as energy-saving challenges. • Be sure to track and evaluate success for all of these, and communicate it back to leaders. 	<ul style="list-style-type: none"> • Be on the lookout for influential champions who understand the value of strategic planning and/or prioritize tangential issues, like economic development. • If possible, interview your leaders to determine the issues they believe are most important, and be sure to highlight the ways a CESP can meet those needs. • Find allies in other organizations or jurisdictions that you know your leaders compare themselves or listen to. • Look for leadership in the broader community who are willing and able to spearhead this kind of planning effort; piggy-back on regional efforts. • Take advantage of training and planning resources, like those found on DOE’s Technical Assistance Program Solution Center: www1.eere.energy.gov/wip/solutioncenter • Revisit next year!

CESP in Action: Strategic Energy Plans Cited in This Guide

- Albany, NY – Capital Region Sustainability Plan <http://sustainablecapitalregion.org/>
- Ann Arbor, MI – Ann Arbor Energy Plan www.a2gov.org/government/publicservices/systems_planning/energy/Pages/AboutTheEnergyOffice.aspx
- Annapolis, MD – Sustainable Annapolis Community Action Plan www.annapolis.gov/Government/Departments/NeighborhoodEnvironmental/Sustainability.aspx
- Arlington County, VA – Community Energy Plan <http://freshaireva.us/2012/04/energyplan/>
- Austin, TX – Austin Energy Resource, Generation, and Climate Protection Plan to 2020 www.austinenergy.com/About%20Us/Environmental%20Initiatives/climateProtectionPlan/index.htm
- Bad River Band of Lake Superior Tribe of Chippewa Indians – Tribal Energy Plan www.badriver-nsn.gov/planning-a-development
- Baltimore, MD – The Baltimore Sustainability Plan www.baltimoresustainability.org/index.aspx
- Berea, KY – Energy Cost-Savings Plan <http://bereaky.gov/the-berea-energy-costs-savings-plan/>
- Block Island (New Shoreham), RI – Energy Plan www.new-shoreham.com/docs/Energy%20Plan1.pdf
- Boulder, CO – Climate Action Plan www.bouldercolorado.gov/index.php?option=com_content&view=article&id=15356&Itemid=2150
- Chicago, IL – Chicago Climate Action Plan www.chicagoclimateaction.org/
- Corvallis, OR – Sustainability Action Plan <http://sustainablecorvallis.org/action-plan/action-planning-process/>
- Denver, CO – Denver Climate Action Plan www.greenprintdenver.org/about/climate-action-plan-reports/
- Denton, TX – Sustainability Plan www.cityofdenton.com/departments-services/sustainable-denton
- District of Columbia – Sustainable DC <http://sustainable.dc.gov/page/what-sustainable-dc>
- Eugene, OR – Community Climate and Energy Action Plan www.eugene-or.gov/index.aspx?nid=511
- Frederick County, MD – Comprehensive Energy Plan <http://frederickcountymd.gov/index.aspx?NID=4353>
- King County, WA – 2010 King County Energy Plan www.kingcounty.gov/environment/climate/king-county/2010-energy-plan.aspx
- Lawrence, KS – Climate Protection Plan www.lawrenceks.org/climate_protection/
- Montpelier, VT – enVision Montpelier City Master Plan www.montpelier-vt.org/group/128.html
- Knoxville, TN – Energy & Sustainability Work Plan www.cityofknoxville.org/sustainability/
- New York City, NY – PlaNYC <http://home2.nyc.gov/html/planyc2030/html/home/home.shtml>
- Omaha, NE – Omaha Energy Plan www.omahaenergyplan.org/
- Philadelphia, PA – Greenworks Plan www.phila.gov/green/greenworks/index.html
- Pinehurst, NC – Strategic Energy Plan www.vopnc.org/Portals/0/SiteContent/BoardDocs/Resolution%2009-26%20Adopt%20Strategic%20Energy%20Plan,%2010-13-09.pdf
- Pittsburgh, PA – Climate Action Plan, Version 2 <http://pittsburghclimate.org/category/resources/>
- San Jose, CA – Green Vision <http://greenvision.sanjoseca.gov/GreenVisionGoals.aspx>
- St. Louis County, MO – Energy Efficiency and Conservation Strategy/St. Louis County Green and Growing <http://green.stlouisco.com/CountyEnergyStrategy>
- Topeka, KS – Energy Efficiency and Conservation Strategy www.topeka.org/pdfs/CityofTopekaEECS.pdf
- Toronto, ON, Canada – Climate Change, Clean Air and Sustainable Energy Plan www.toronto.ca/energy/plan.htm

For additional examples of community plans, please see lists from ACEEE (<http://aceee.org/sites/default/files/publications/otherpdfs/appendix-local-energy-plansummaries.xlsx>) and ICLEI (www.iclei.usa.org/sustainability/action-center/planning/List%20of%20U.S.%20Sustainability%20and%20Climate%20Plans.pdf)



STEP 1: ESTABLISH AND CHARGE A LEADERSHIP TEAM

WHAT: The first critical step is putting in place a strong Leadership Team once the development of a community energy strategic plan (CESP) has been officially authorized (see Introduction).

WHY: To drive the process to successful completion it is necessary to establish a committee that includes leaders who will:

- Maintain continued focus on the CESP process.
- Connect the government offices necessary for success.
- Motivate key stakeholders to contribute to the plan.
- Inspire completion of an effective plan.
- Ensure its implementation over time.

WHO: The local government office or group that is initially authorized to do the planning activities will usually do the up-front work to put the Leadership Team in place.

HOW: During this phase of the planning process, the CESP initiators will need to:

- Identify Effective Leaders
- Charter and Direct the Leadership Team

WHEN: The Leadership Team should be established as quickly as possible, but no later than within a 1-2 month timeframe once development of the plan is authorized. Putting the team together quickly and early in the process will get momentum for the process going, demonstrate early progress to the official(s) that authorized the CESP, and assure that leadership is in place to help identify and engage the appropriate stakeholders (Step 2).

CESP Timeline										
Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5	Goals and Strategies									
Step 6	Identify Actions									
Step 7	Identify Financing									
Step 8								Implementation Blueprint		
Step 9								Monitoring Plan		
Step 10	Scope and Develop Final CESP								Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10

Identify Effective Leaders

Key Roles

To make sure the planning process works efficiently and effectively, there are several “roles” that will be important to fill: 1) a **Champion** for the CESP; 2) an on-the-ground **Plan Manager**; and 3) a **Leadership Team** of government and local representatives. As discussed in the Introduction, the Champion and Plan Manager will likely emerge in the process of initiating and authorizing a CESP. What follows is a description of the importance and role of each of these key positions as the planning moves forward.

Champion: the executive-level authority behind the CESP – provides top-level commitment and motivation for the effort.

- Who: The Champion will be a highly visible, executive-level sponsor:
 - **For a local government CESP:** Mayor, City Councilor, or other prominent government official or staff member. In some cases, this role may be held by a group, such as the full City Council – even here, there will likely be one real champion for the process who keeps it moving forward.
 - **For a community-wide CESP:** There may be two leaders both serving as Champions – an influential government official, as well as a highly visible and effective local community leader.
- Role: The Champion offers overall leadership and authority for the CESP, including the ability to direct staff time and provide final approval for policy and budgetary decisions. The Champion also gives the process credibility and political will, brings visibility to the Leadership Team, and inspires pride in the project.
- Why important: Political and/or management sponsorship is critical for institutionalizing the CESP, accessing and providing resources, marshaling other senior government managers to take action, and making the plan’s implementation sustainable.

Plan Manager: the lead administrator for the CESP process – directs logistics and serves as a day-to-day advocate. The Plan Manager may be supported by internal and/or contractor staff.

- Who: The Plan Manager is a senior manager with the skills, time, and resources needed to successfully orchestrate and develop a complete plan. Depending upon the scope of the plan, this may be a full-time assignment or a part-time addition to other duties. If possible, the Plan Manager should be someone who already has or can be given direct access to the Champion. Potential candidates for this role include:
 - **For a local government CESP:** Public Works Manager; Energy Manager; Sustainability Coordinator; a volunteer from a subcommittee of the city council; or other interested and capable staff.
 - **For a community-wide CESP:** May also be a local government staff person as above, or may be a member of a local organization that is intimately involved in the planning process (for example, a local non-profit that is driving the community activities associated with the planning process).
- Role: Provide support to the Leadership Team, ensure effective communication within the Leadership Team and between the Team and the broader community, and manage the day-to-day work required to develop the plan. This will include developing meeting schedules, preparing agendas, and facilitating discussions for the Leadership Team and stakeholders; managing the development and drafting of key pieces of the CESP, including the energy profile and final CESP report; and publicizing the work along the way to key target audiences.
- Why important: The CESP process is a significant and complex undertaking and requires a central figure to drive and focus the effort on a daily basis and keep people engaged throughout the process. The Champion and Leadership Team members will be busy people with many other duties, so it is critical that a staff-level Plan Manager own the responsibility for getting this effort across the finish line.

Tips for the CESP Plan Manager on successful project management can be found at the end of this chapter in the **Step1 – Appendix**.

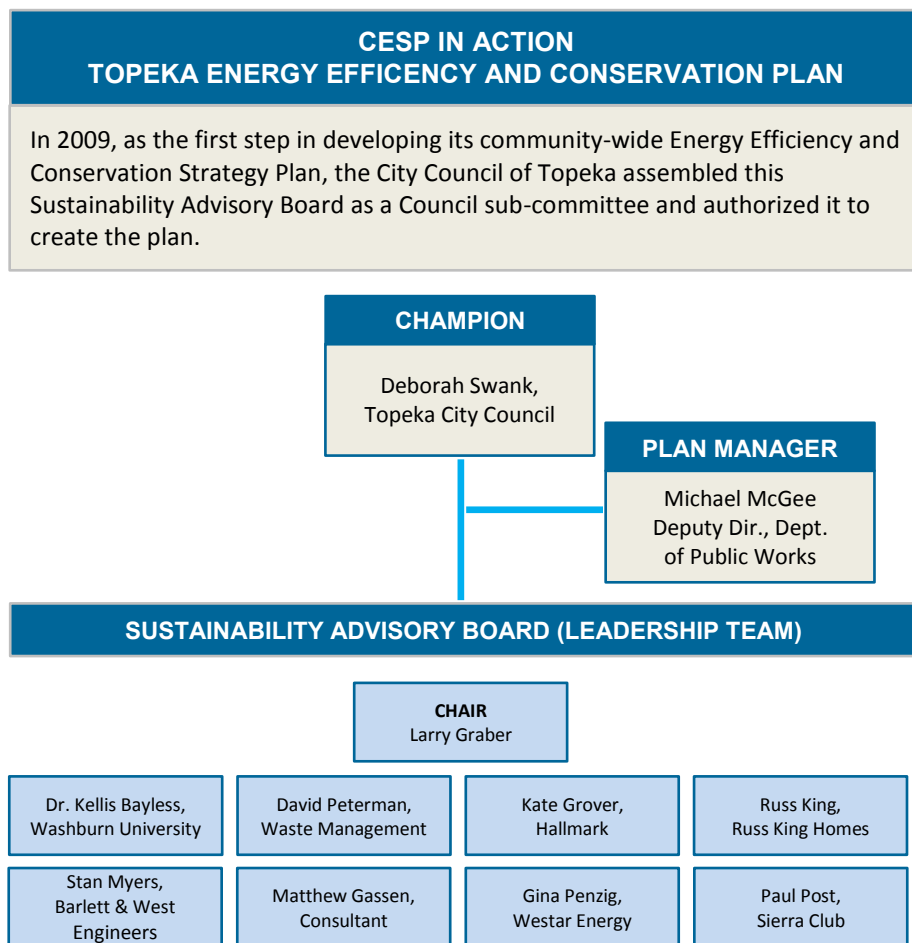
Leadership Team: an additional group or task force of influential local government and/or community officials and representatives charged with driving the CESP process. This group provides high-level thought leadership, guidance, and support for the final recommendations for the plan. The Leadership Team will report to the Champion, and the Plan Manager will be an administrative member of the Team. The Team may be called an Energy Planning Task Force, Sustainability Advisory Board, Commission on Sustainability, etc.

- Who: Candidates include individuals who routinely provide leadership on energy-related issues, as well as those who represent key elements of the government or business community that need to be engaged for the overall success of the CESP.
 - **For a local government CESP,** heads or representatives from the following departments/agencies:
 - Sustainability/Environment/Energy
 - Municipal Utility
 - Public Works
 - Waste/Water Management
 - Buildings/Construction
 - General Services/Facilities/Fleet Management
 - Housing
 - Transportation
 - Planning
 - Economic Development
 - Information Technology
 - Procurement
 - Budget Office
 - **For a community-wide CESP,** representatives from local government listed above, and heads or representatives from local:
 - Businesses
 - Colleges or universities
 - Utilities
 - Community energy committee
 - Non-profits
 - Homebuilders' associations
 - Financial institutions
 - Transportation authorities
- Role: The Leadership Team will not likely be the final decision makers but will provide recommendations on and for CESP elements. They will represent diverse points of view, encourage buy-in as representatives of important stakeholder groups, provide input to development of components of the plan, and provide the authority (or influence those with the authority) for plans to become actions.
- Why important: This team can bridge across government departments and/or into the community, expand ideas incorporated into the plan, and lend transparency to the process. They will also provide insights into putting the plan into action.

Effective leadership can come in different forms – no two communities’ leadership structure will look exactly the same, but should include these key roles. In addition, the Leadership Team may want to call on others to assist with some of the detailed or technical steps of the planning process, such as developing the profile of current energy use (Step 4) or identifying financing options (Step 7). These additional resources will be identified through the stakeholder outreach efforts (Step 2).

Recruiting Effective Leaders

The CESP will be most successful if local government, community leaders, and gatekeepers are engaged as the owners and initiators of the plan. Therefore, the search for strong leaders to fill the key roles **should not be limited to individuals with obvious connections to the topic of energy planning**. The outcomes associated with a thoughtful and directed approach to the local energy future – economic development, reduced spending for government and citizens, a cleaner environment – are goals for many government departments and community organizations. Focus on finding individuals motivated by these potential outcomes that can provide the necessary time, skills, and enthusiasm for this project.



To fill out these broader leadership roles, look for representatives and decision-makers across all local government departments and leading community organizations:

- Know your local political and influence structure – look for logical supporters who are connected throughout the community.
- Understand the community and its issues – this will provide insights into where to look for leaders who are passionate about these issues.

- Identify known movers and shakers in other fields – while their primary day-to-day focus may not be directly related to energy, they can bring useful insights from their own perspectives.
- Look to already established government, business, and civic and cultural leaders for suggestions – Business/Chamber of Commerce/Rotary groups, churches, or influential arts-based cultural organizations – they know their constituencies and can give authority for action.
- Be sure to consider representatives from the local utility(ies) – they will provide valuable insights into the local energy landscape and can provide useful data and resources.

Once you begin recruiting the people that have been identified, speak individually to the interests and concerns of each. Leaders are being asked to make a significant commitment of time and effort, and they are most likely to agree to be involved if they see that the process will result in outcomes that address issues they believe are important. Have a clear proposal for each of them on the potential outcomes for the community from the effort, and the time commitment you are looking for. To assist with recruitment, a **Sample Invitation to Participate on the Leadership Team** is included at the end of this chapter.



While not all of the potential leaders identified will ultimately serve as part of the Leadership Team, many will still have valuable perspectives and opinions. Consider including them as part of your broader stakeholder engagement (Step 2). Keep this in mind for “hidden stars” you may come across in the recruiting process as well. These are individuals who have, on their own, been quietly taking action to drive efficiency or renewable energy projects in their sphere.

Charter and Direct the Leadership Team

Articulating a clear scope of work and expectations concerning roles, responsibilities, and timeframe – as through a formal Leadership Team charter – is recommended for this effort to:

- Help the Plan Manager manage the CESP process.
- Provide Leadership Team members with useful guidance.
- Result in the most effective use of the members’ time and expertise.
- Help the process stay on track.

In preparing a formal charter, the Plan Manager, in coordination with the Champion and Leadership Team, should specify:

- | | |
|--|--|
| • Specific leader, sponsor, and membership | • Ground rules |
| • Project scope and team objectives | • Decision making process |
| • Member roles | • External and internal communication strategies |
| • Timeline and commitment | • Process for feedback on team effectiveness |
| • Meeting process and scheduling | |

The charter should outline structures and processes for reaching broad agreement and support for ambitious but achievable goals and actions. It should also clearly delineate the authority that the Team has relative to the local government officials who will accept recommendations and authorize actions. This distinction should be made clear in the roles and responsibilities to the Leadership Team. The work of the Team will also be clearer if a schedule is developed up front for meetings and communications. It is important to specify who will be the gatekeeper for information and the schedule for the Team – likely the Plan Manager – and indicate the preferred method for communication. For additional guidance, a **Leadership Team Charter Elements** document is included at the end of the chapter.



It can be highly effective to have the Leadership Team members officially recommended by the Mayor or Town Manager and approved by City Council or Select Board, so that the Team is connected to and authorized by local government decision makers.

Tools

[Tool 1.1: Sample Invitation to Participate on Leadership Team](#) (.docx file)

[Tool 1.2: Leadership Team Charter Elements](#) (.docx file)

Step 1 – Appendix

Tips for the CESP Plan Manager – Project Management & Effective Meetings

The CESP Plan Manager will be the project manager for the development of the energy plan, and will need to treat the planning process like any other project. The steps outlined in this Guide represent the structure for managing this project; be sure you are using good project management practices throughout. Here are a few general guidelines that will help ensure a smooth planning process:

- **Preparation** – One of the Plan Manager’s primary responsibilities will be not only to organize and manage the approach for developing the full CESP, but also to be the person who prepares for all its activities. Plan ahead and prepare for interactions with your Leadership and Stakeholder groups, for meetings, for working groups, and all other activities. Think ahead of time about the tasks that will be undertaken, and be sure to provide space, materials, and other support that will make these activities run smoothly.
- **Communication** – The Plan Manager will be responsible for communicating about activities, schedules, ideas, expectations, and all other needs of the process. This will include developing meeting schedules, preparing agendas, and facilitating discussions; managing the drafting of written work in formal reports as well as less-formal outreach information; and publicizing the work along the way to key target audiences. If you are not skilled in all of these types of communication, recruit others to help specifically augment your strengths.
- **Scheduling** – Thoughtful scheduling is critical for minimizing the stress of developing a CESP. Think about a long-term timeline for the planning at the beginning of the process. Once you have developed a target adoption and implementation date, think “backward” and identify how long each step will take, and be sure you have allowed enough time. Add in contingency time, or make your target deadlines flexible, because the unexpected *will* happen.
- You will also be responsible for scheduling lots of meetings, calls, and other formal working activities with others. Be accommodating when you can, but firm when necessary – meeting times can be quite difficult to confirm if you try to match everyone’s preferred schedule. When others are responsible for accomplishing work outside of formal meetings, be sure that they have a clear understanding of their assigned responsibilities, milestones, deliverables, and deadlines – and send reminders and follow-up communications to assure good performance.
- **Monitoring and adjustment** – Be sure to monitor how the planning process is progressing. Stay on top of how the workgroups are performing, how the information is coming together, and how the key players are working together – and be open to adjusting the process or the representation when necessary. Remember that guiding the CESP is not only about a process but also about people – you will be called on to be a source of motivation and wisdom throughout the process!

Managing Meetings

Regardless of the size of the CESP planning effort, the Plan Manager will likely be called on to organize and run many different kinds of meetings – Leadership strategy meetings; task group working sessions; large stakeholder meetings; one-on-one meetings and interviews. If this becomes a major part of the work, the subject becomes controversial, or the groups are large or contentious, consider hiring trained facilitators to help. Here are some general tips for organizing and running good meetings:

- **Planning Your Meetings** – Just as an architect would not show up to a construction site without a blueprint in hand, meeting organizers need to create a design for every meeting. This is important not only so that you are prepared to run the most-effective meeting possible, but also because different kinds of meetings have different purposes and need for structure:
 - **Information sharing** – Meetings with the purpose of giving update reports, sharing research, or brainstorming ideas for later ranking fall into this category. Since there is no decision making involved, these discussions are typically chaired or hosted, rather than facilitated, but still benefit from well-designed agendas.

- **Planning and/or problem solving** – Planning discussions include activities such as visioning and creating goal statements, describing objectives and expected results, assessing needs, identifying priorities, and creating detailed action steps. Problem solving includes activities that engage participants in identifying and resolving issues together, such as reviewing data, identifying problems, using ranking systems to sort ideas. Because lots of decisions and action-related results are developed during these conversations, they require a lot of structure and active facilitation.
- **Relationship building** – The key purpose of some meetings is to help people to get to know each other and to build cooperation. Important agreements may result from these meetings, and careful planning is recommended.

To plan for any of these meetings, consider the following steps:

- **Conduct background research** on the topic as well as the participants or participant groups – know what you will be talking about and who you will be talking to.
- If appropriate, **interview or survey participants** to understand what they expect to achieve or need from the process.
- **Create a preliminary design** for the meeting, and review and get approval or buy-in with select members or leaders of the participant group.
- **Develop an agenda**, with detailed process notes for yourself or the facilitator.
- **Communicate the agenda** in advance of the meeting.
- **Prepare for the meeting** – schedule time and place; prepare needed materials, worksheets, displays, and handouts.
- **Remember to get feedback** – design an evaluation form or process.

Meeting Management –The most effective facilitators think in advance about how they will manage their meetings, no matter the size or type. This includes not only the content of the meeting and the objectives and desired outcomes, but also the methods and procedures for running the meeting, the tools to use, and how relationships and good communication will be maintained. The last of these includes thinking about communication rules for the meeting as well as the expected group dynamics and how to cope with them. Here are some of the elements of effective meetings:

- **A detailed agenda** – with the meeting objective, content, timeline, and responsibilities for each item
- **Clear process notes** for the person running the meeting
- An understanding and consensus on **group norms of behavior** for the meeting (participating, listening, agreeing and disagreeing)
- Clarity about **how decisions will be made**, and by whom
- A process designed to **result in clear closure** – that is, the meeting objective will be met
- **Detailed and clear minutes**
- **Specific follow-up steps**
- **A meeting evaluation**

During the meeting, the facilitator manages participation, keeps things on track, and helps and supports the group’s effectiveness. The following tasks help map out the work of the facilitator as the meeting progresses:

- Starting the meeting:
 - Welcome and introduce participants
 - Explain roles
 - Clarify meeting objective
 - Review and approve agenda

- Explain the process
- Set time expectations
- Start the discussions
- During the meeting:
 - Monitor the group’s understanding of the purpose of tasks for clarity
 - Monitor the process for effectiveness
 - Check the pace of the meeting
 - Take the pulse of the meeting and manage interpersonal interactions when needed
 - Summarize periodically
- Ending the meeting:
 - Help participants make a clear statement of what was accomplished
 - Develop clear next steps with assignments and time frames
 - Evaluate the meeting

Resources Recommended for More In-depth Guidance

- The Planning Tool Exchange (an online hub for the tools, resources, and organizations in community planning) www.planningtoolexchange.org/
- The City of Chicago – Lessons Learned: Creating the Chicago Climate Action Plan www.chicagoclimateaction.org/filebin/pdf/LessonsLearned.pdf
- ICLEI Outreach and Communications Guide (a great resource for information on effective communications with target audiences) www.icleiusa.org/action-center/engaging-your-community/outreach-and-communications-guide
- The National Coalition for Dialogue & Deliberation Resource Guide on Public Engagement (For overview of core principles of public engagement and the variety of strategies, tools and resources available to practitioners) www.ncdd.org/files/NCDD2010_Resource_Guide.pdf



STEP 2: IDENTIFY AND ENGAGE STAKEHOLDERS

WHAT: Engaging members of the community in the energy planning process will help your plan to succeed, because creating a viable, transformative energy future rests in the hands of the entire local government or community. When identifying who to include, remember some individuals will already have an understanding of and a vested interest in the effort of defining a sustainable energy future; others, however, may have not yet been engaged in the conversation or moved to action.

WHY: Involving a wide range of stakeholders across local government and the community is important because:

- Broad-based stakeholder engagement helps to lay the foundation for broad-based support.
- The plan needs the support of department heads and elected officials who are interested in their constituents' and stakeholders' points of view.
- Stakeholders have valuable insight to offer and provide real local context for ideas.
- Input from stakeholders helps prioritize recommendations based on the community's aspirations and priorities.

WHO: The Leadership Team will guide the identification of stakeholders and plan the stakeholder engagement effort, with the Plan Manager facilitating and managing the logistics. The Project Manager may want to team up with their government's public affairs and/or communications staff for this step, and consultants, interns, and/or local volunteers can also provide valuable help.

HOW: During this phase of the planning process, the Leadership Team will need to:

- Identify Stakeholders to Include
- Engage Stakeholders
- Plan to Maximize Stakeholder Value throughout the Planning Process

CESP Timeline										
Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5					Goals and Strategies					
Step 6						Identify Actions				
Step 7							Identify Financing			
Step 8									Implementation Blueprint	
Step 9									Monitoring Plan	
Step 10	Scope and Develop Final CESP								Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10

WHEN: Developing a stakeholder outreach strategy is typically the first item of business for the Leadership Team. Stakeholder input is important throughout the planning steps; therefore, identifying the right people and organizations to engage and developing approaches to recruit their help are priority tasks. The Plan Manager and Leadership Team will want to allow 4-6 weeks to create and launch a stakeholder engagement strategy. The engagement itself will continue throughout the energy planning process.

Identify Stakeholders to Include

At the broadest level, CESP stakeholders are all of those individuals and organizations that may be affected by the actions that result from the CESP. Because this includes almost everyone within the local government's jurisdiction, hone in on key stakeholders that span a range of interests and who must be engaged for the plan to be implemented effectively. Keep in mind what stakeholders will be called on to contribute. Look for individuals and groups who can provide:

- Ideas, expertise, and representation – the CESP will be stronger and more relevant with input from many perspectives.
- Buy-in and support – the CESP is more likely to be successful when the process and outcomes are designed by and for the benefit of the community.
- Funding and resources (financial, human, information) – these will be needed in planning and carrying out the plan.

To find this type of input for a **local government CESP**, include:

- Local government officials, heads of departments, and government staff, including finance staff.
- Some level of outreach to the broader community to be sure plans and activities are transparent to tax-paying citizens. Their understanding and approval will be important when asking for financial support for plan activities. In addition, including community members early in the process provides good public relations for the government's "Lead by Example" efforts.

For a broader community-wide CESP:

- An energy strategy for government operations will be a priority component of a broader community-wide plan, so continue to engage the stakeholders relevant in a government CESP.
- Reach out to businesses working in the energy space, energy-intensive industries with high power costs, as well as other general business leaders and manufacturers.
- Include environmental organizations, neighborhood representatives, community activists, students, and senior citizens to reach the broader spectrum of the entire community.

As you identify specific people or organizations, think about how they may fill general categories of stakeholders. The **Stakeholder Matrix Template** included at the end of this chapter can help organize your search. The completed matrix that follows provides examples of groups within each category to consider.

Forming collaborations across local government departments or beyond into the community makes the planning process more effective and provides valuable partnerships for the future. The following questions help identify which relationships will be most useful for the CESP process.

- Who among potential stakeholders are perceived to be **allies**? Who is important to engage that may be **harder to convince**?
- Who are the strongest local **leaders** – those who speak for or motivate the primary audience for CESP activities (e.g., government staff, community members)? Who are the **gatekeepers** – those who can facilitate or prevent access to the primary audience?
- What **political and civic authority** do potential stakeholders and governing bodies have – who has the authority and ability to shape the plan and its outcomes?
- Who has the **ability and resources** to help implement the plan once it is created?

Sector	Areas of Impact				
	Energy Efficiency in Buildings & Facilities	Energy Efficiency in Transportation	Energy Supply	Economic Development	Financing
Government Plan	Dept. of Public Works	City Fleet Management	Municipal Elec. Dept.	Municipal Eco. Devel. Office	City Budget office
	Housing & Neighborhood Devel.	Waste and Recycling Mgmt.	Landfill Gas Facility	City Planner	Finance Authority
	School District Super.	Parks & Rec: bike path mgmt.		Industrial Retention Office	
Community-Wide Plan also includes:					
Residential	Community Energy Committee	Metro Transit Authority	Heating Oil Distributors	Homebuilders' Assoc.	Financial Institutions
Commercial	Chamber of Commerce	Taxi Association	Solar Manufacturer	Private Sector Clean Energy Technology Companies	Financial Institutions
Non-governmental	Low-Income Advocates	Pedestrian Coalition	Community Solar Coalition	Economic Development Non-Profits	Foundations
Institutions	Local Hospital System	Local University	Local University	Labor Unions	Institutional Foundations
Utilities: electric & fuel	Energy Service Companies (ESCOs)	Local Biofuel Coop	Gas Utility		
Environmental Interests	Environmental Groups (Sierra Club, etc.)			Environmental Justice Groups	
Elected Officials and Their Policy Staff					

- Who are the **non-local stakeholders** that would be useful to engage? Whatever strategies are adopted, they will be implemented within the context of existing regional and state-wide energy strategies. To better understand the energy-related policies and programs that exist at those levels, include representatives from the State Energy Office and any county or regional planning offices.
- How can the planning process engage the jurisdiction's **congressional representation**? Public support from these highly visible officials can stimulate interest in the process.

Engage Stakeholders

Establish a Strategy for Stakeholder Input

Once the key stakeholders have been identified, the CESP Leadership Team will develop an engagement plan to lay out the strategy for working with these groups. Different stakeholders will be engaged in different ways, depending on what they are expected to get out of and contribute to the process. It is therefore essential to clarify up front which level and form of engagement is being sought for each stakeholder and to facilitate accordingly.

There are three basic approaches to engage stakeholders:

- Inform and educate them of the planning process and value – appropriate across the CESP constituency.
- Solicit their input on vision, goals, and CESP actions – appropriate for all influential stakeholders and representative individuals and groups.
- Ask for their contributions to the plan in the form of time, expertise, resources, etc. – appropriate for specific stakeholders who have something valuable to offer the CESP process.

Think about which of these approaches are appropriate for various stakeholders and consider the following ideas on how to reach them.

- For a **local government CESP**, engagement might include:
 - Informing and educating
 - Broad communication to all staff, with information on the process, a call for volunteers, and referral to further materials.
 - Soliciting input
 - Departmental or cross-departmental meetings or summits to learn about the process; contribute ideas on vision, current and potential activities, and potential resources for implementation; and establish overall support (include key government staff).

- Working groups to contribute to recommendations for CESP actions and review the practical implications of implementation (include targeted employees with specific expertise in sectors with anticipated priority).
 - Asking for contributions
 - Working groups that meet with finance teams and budget managers to investigate financial implications of potential plan initiatives.
 - Technical groups to assist in data collection and analysis (include those with access to information on energy use, financial data).
- For a **community-wide CESP**, levels of engagement might mirror those above, with broader representation to match the broader need for expertise across the sectors of the community. Depending upon the particular areas of local civic attention, a community plan might also include:
 - Websites for distributing information and soliciting volunteers.
 - Open community forums to introduce the project and gather input for visioning (include all citizens, or open to targeted groups for manageability).
 - Targeted workshops for youth, low-income, or senior citizens.
 - One-on-one interviews to solicit input and discuss future support with key community stakeholders.

More ideas for stakeholder engagement strategies that have been found effective are presented in the **Step 2 – Appendix**.

Types of Enhanced Engagement

There are a number of ways that the CESP might rely on stakeholders to provide in-depth expertise and resources to assist the planning process and future implementation of CESP activities. As you identify stakeholders, keep an eye out for those individuals that might provide these types of extra value.

- Many large planning efforts establish **advisory committees** or task forces of local “experts” to inform various aspects of the planning or represent various constituencies – example committee categories include: Buildings, Industry, Transportation, Low-Income Impacts, and Youth Advisory Group.
- While engaging stakeholders, keep an eye out for groups who may be effective **partners** in the planning effort. Partnerships can broaden the reach of the planning process, provide additional support, and add credibility. When searching for a partner, look for public, private, and nonprofit organizations with a history of collaboration and community involvement that are likely to be a trusted source for stakeholders. Partners can distribute materials, provide help with stakeholder forums, and generate social norms around participating in the energy planning.

CESP IN ACTION: CHICAGO CLIMATE ACTION PLAN

With the help of a facilitator, the City of Chicago convened the following groups for its community-wide planning process:

- Multi-Stakeholder Task Force of Public and Private Leaders (9 to 19 people)
- City Departmental Steering Committee and Work Groups
- Expert “Sector” Groups for Buildings, Transportation, Energy, Waste, Landscape, Etc. (9 to 25 people)
- Summits for the Community, Business, and Labor (70 to 125 people each)

The City worked with these groups to: 1) get feedback on the planning and research process, 2) collect ideas for actions, 3) prioritize actions, and 4) develop implementation plans for actions.

- The best partners will have:
 - A complementary mission/goal,
 - Audiences that overlap with priority stakeholders, and
 - Elements that add value to the planning process, as well as find value in the process.
- For example, local media outlets are potential partners that could provide added exposure for the CESP and its activities.
- As the process moves forward, **working groups** can help dive deeper into certain aspects of the plan. Individuals with specific expertise can be recruited to help with targeted CESP steps – for example:
 - A working group to assist with Step 4 (Assess the Current Energy Profile), calling on the expertise of the local government and representatives from the local utility companies.
 - A working group to assist with Step 7 (Put Together a Financing Strategy), including the government’s budget and tax officials. Representatives from the community’s financial institutions could serve as a community-wide plan’s advisors for this step.



The Leadership Team will also have varying roles as they work with stakeholders – sometimes as listeners (when stakeholders have input); sometimes as drivers for the process (when the objective is to introduce the project to stakeholders and inform them of progress); and sometimes as promoters of the work (when stakeholders are resisting decisions or actions). These roles should be clearly defined as the engagement plan is being developed.

Motivating Stakeholder Participation

One way to heighten stakeholder dedication and participation is to issue an official “invitation” from the CESP Champion that clearly articulates support for the process and outlines its expected outcomes. This is particularly valuable if asking for a substantial time or resource commitment from the strongest leaders and political authorities. A **Sample Invitation to Participate as a Stakeholder** is included at the end of this chapter.

For any type of involvement, stakeholders are most likely to be motivated to participate and contribute if they know that:

- The CESP will bring value in terms of their individual or organization’s interests.
- They have something to contribute and that their input will be heard.
- The local government is committed to following through and acting upon the plan.

For example:

- For a **local government CESP**, invite government employees to be involved in defining how they individually as well as their departments can contribute to real savings for their community.
- For a **community-wide CESP**, speak to the ways that saving energy can help address issues that are important to each type of stakeholder, and let them know what their expertise can offer to the process.

Be sure to also include the media in the outreach planning. If they have not been brought in to assist with this step already, this is a good time to engage the government’s public affairs and/or communications staff. Good media coverage, guided by real stories of the ways energy planning can affect local concerns, is invaluable to establishing broad support for the process and motivating stakeholders to get involved.

Like any public process, there will likely be critics of the CESP effort. The most effective tactics to engage these parties in a positive manner are the same as those used with supporters – find a way to understand their specific concerns and motivations, and then lay out how a solid planning effort can speak to their interests. It may be most effective to meet with organizations or individuals who have expressed significant concerns before public events. If initial critics are ultimately motivated to back the CESP process, they can be a valuable asset to the resulting plan.

Plan to Maximize Stakeholder Value throughout the Planning Process

Finalize the engagement plan by mapping out the right timing for each type of interaction. While stakeholders may have opinions and ideas at any stage of the planning process, obtaining their input and help will be most valuable when:

- Building support for the plan (early and throughout).
- Creating a future energy vision (Step 3).
- Understanding what has already been accomplished (Step 4).
- Gathering ideas for actions, strategies, resources, and funding (Steps 6 & 7).
- Prioritizing ideas (Step 6).
- Identifying potential resources and partners for implementation (Steps 7 & 8).

Coordinate the timing of stakeholder meetings so that collected input is available when appropriate plan activities are underway.

- Establish a stakeholder engagement timeline and identify associated needs and resources. The timeline should be realistic. Creating deadlines and milestones will help keep the development of stakeholder outreach on schedule.
- Determine the budget and, if necessary, identify any resources that may be able to provide funding or technical assistance.
- Then develop plans for formal meetings, keeping the scopes focused on discrete objectives. Stakeholders will have a wide range of ideas and interests, but it is best to concentrate on the specific and quantifiable needs of your government or community as they pertain to energy planning. There are a wide variety of ways to set up and facilitate these meeting. See the Resources section at the end of this chapter and the **Step 2 – Appendix** for a list of suggested strategies and additional tools. A **Sample Agenda for Stakeholder Kick-Off Meeting** is also included at the end of this chapter.



You may find inexpensive help with meeting administration and facilitation from graduate students or interns from local colleges or mediation programs.

It is also valuable to incorporate guidelines for ongoing communication with stakeholders about the progress of the CESP development in the engagement approach. Once you have stimulated interest and motivated actions, keep stakeholders involved with interim reports of progress as the plan develops. Effective methods include:

- Periodic newsletters
- Blogs
- City department staff meetings
- CESP websites and social media
- Community forum emails
- Flyers in utility bills
- Announcements at other public meetings and events
- Updates at regular meetings of stakeholder organizations
- Press releases

Examples of effective progress reports and communications strategies can be found in Steps 9 and 10.

Tools

[Tool 2.1: Stakeholder Matrix Template \(.docx\)](#)

[Tool 2.2: Sample Invitation to Participate as Stakeholder \(.docx\)](#)

[Tool 2.3: Sample Agenda for Stakeholder Kick-Off Meeting \(.docx\)](#)

Resources Recommended for More In-Depth Guidance

- The National Coalition for Dialogue & Deliberation Resource Guide on Public Engagement (For overview of core principles of public engagement and the variety of strategies, tools and resources available to practitioners). www.ncdd.org/files/NCDD2010_Resource_Guide.pdf

Step 2 – Appendix

Stakeholder Engagement Strategies to Consider

An effective stakeholder engagement plan recognizes that there are different venues for different audiences and purposes. The best plans define the type of information that needs to be gathered from or imparted to each type of stakeholder and outline methods to accomplish this as cost-effectively as possible. Some stakeholder groups will have interests that overlap – plan to engage them together.

Here are some popular approaches ordered from high- to low-touch:

- **One-on-one meetings with select leaders** – A valuable tool for the most-influential potential supporters or detractors. Often the participation of the Champion and or select members of the Leadership Team can help to garner strong support.
- **Interviews and focus groups** – Often used to introduce the CESP process to key stakeholders and representatives of key constituencies. These types of meetings are also used to recruit leaders and work group representatives.
- **Charrettes** – Use these formally facilitated meetings designed to elicit ideas and input for vision, goals, priorities, etc.
- **Attend *their* meetings** – Ask to participate in regular meetings of your stakeholders’ organizations, providing them with information on the benefits of the CESP to their issues and asking for their support.
- **Regular existing meetings** – Sign up as a routine agenda item for regularly scheduled staff meetings, city council meetings, or other current public meeting structures to build a following for the process as it unfolds. Try setting up “Lunch and Learn” sessions within city departments to keep staff up to date with progress.
- **Workshops/open houses** – hold specific working meetings to provide information and receive feedback. These tend to draw limited numbers of participants, so consider adding a social aspect, such as a potluck or dessert party, and schedule at times and locations convenient to a wide range of the target audience. Holding a special event, such as an Energy Fair, in conjunction with some other highly visible public festival or event may help to draw in a bigger crowd.
- **Surveys/questionnaires** – Develop these as a cost-effective way to publicize the process and gather opinions across a broad base of the population. This technique can also help with data collection for Step 4 (Assess the Current Energy Profile). New web-based tools like Survey Monkey can make this approach easy and inexpensive. Keep in mind however, that web-based feedback mechanisms may exclude those without internet access.
- **Interactive websites and social networking** – Establish an on-line presence as a way to share information about the CESP as it unfolds, including text and video. This medium can also provide a way to gather input into the planning process. These tools include full web pages, blogs, Twitter, social networking sites like Facebook, and targeted community interaction tools like Mindmixer.
- **Public displays** – Develop informational posters and flyers to circulate through the government offices or in well-travelled public venues. These can be designed to both provide information and receive feedback.
- **Informational campaigns** – Provide information and updates on CESP progress. Can be through mailings, local newspapers, community cable programming, and web postings. Because these typically do not include opportunity for feedback, these may be best used in the beginning and end of the process.



STEP 3: DEVELOP AN ENERGY VISION

WHAT: An effective energy vision statement offers a representation of what the community wants to look like 10-20 years into the future.

WHY: This “future best self” provides a focus for the rest of the work that will go into the CESP. A clearly articulated, transparent, and shared vision of the community’s energy future sets the direction for subsequent decisions about goals, strategies, and actions.

WHO: This step will be initiated and guided by the Leadership Team, with input from key stakeholders.

HOW: During this phase of the planning process, the Leadership Team will need to:

- Identify Guiding Principles and Priorities to Use as a Basis for the Vision
- Create a Focused Vision Statement
- Share the Final Vision with the Broader Community



WHEN: The development of a new energy vision statement will take between 4-6 weeks and should start after the Leadership Team is in place, because they will be driving this step. As stakeholder input and buy-in will also be important, key stakeholders should be identified and engaged, though the full engagement plan need not be finalized. Some communities will already have a broader vision mandated for them, or find that a vision of energy use fits within the scope of an existing community vision statement. Re-articulating a broader, established

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Step 8								Implementation Blueprint		
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Month:	1	2	3	4	5	6	7	8	9	10

community goal is acceptable and may be advantageous in some circumstances, as it reduces the time taken for this step. However, do consider the value of developing a vision with a specific emphasis on what the energy future will look like, to use as the motivation and focus for subsequent energy planning work.

Identify Guiding Principles and Priorities to Use as a Basis for the Vision

The Leadership Team will start the process of creating a vision statement by identifying the jurisdiction or community's existing **guiding principles**. These are the overarching objectives that inform all of an entity's activities (not just energy-related ones), and reviewing and prioritizing them will lay the foundation for the energy vision.

For **local government** operations, guiding principles often include:

- Support economic development and job creation
- Save taxpayers money
- Reduce infrastructure redevelopment and maintenance costs
- Demonstrate leadership – “Lead by Example”
- Minimize environmental impacts
- Improve energy security
- Diversify energy supply
- Use local resources

Along with the list above, **the broader community** may be aspiring to:

- Strengthen economic development and job creation
- Assure affordable, reliable, and secure energy services
- Support community engagement
- Improve the quality of life for all residents

Since the most-effective and useful vision statements reflect the guiding principles for all constituencies involved, the Leadership Team should meet with the appropriate stakeholders to help shape its list. When gathering input, observe which objectives are common among many or all stakeholders. These indicate the high-priority principles that will inform the visioning process.

Create a Focused Vision Statement

Next, the Leadership Team will integrate input from the stakeholders, including the high-priority principles, to create a focused energy vision statement. The energy vision outlines what the jurisdiction or community will look like when the CESP is implemented successfully. At a minimum it should:

- **Define the scope**, keeping in mind that the scope of the vision should be aligned with the scope of the plan that will be developed (e.g., *government operations* or *the whole community*).
- **Represent high-priority principles** (e.g., *economic development, energy security, environmental impact*).
- **Be general enough in nature to allow for changes in context during the implementation of the plan** (e.g., *build a green collar workforce* or *minimize environmental impacts*).
- **Focus on outcomes, not on how to get there** (e.g., *assure reliable, affordable, and clean energy* rather than *build a 20-MW solar project*).
- **Represent something attainable but also a stretch to achieve.**

To be most effective, the vision statement should also be:

- **Vivid** – Paint a picture of the desired future.
- **Inspirational and meaningful** – Connect people to the effort.
- **Unique to the local situation** – Speak to the local jurisdiction or community’s culture and values.
- **Simply stated and easy to understand** – Communicate clearly to the target groups.

Preparing such a high-level statement can seem daunting. Consider these ways of focusing the work of your visioning groups:

- Review the high-priority principles already identified.
- Ask the group – “Why are you here today? What motivates you?”
- Start with three words – Find a powerful three-word vision and then only add words you absolutely need to complete it.
- Ask each participant what one outcome they would most like to see. Put all of those outcomes on a wall and try to generate a vision statement that incorporates them all.
- Think about what is impossible, and then back off just a bit to end up with an ambitious but achievable vision.
- Focus on the “critical verb” and use it in the future tense – for example, what will your jurisdiction or community:
 - Be
 - Build
 - Produce
 - Generate
 - Create
 - Lead
 - Avoid
 - Reduce
 - Eliminate
- Study the vision statements adopted by others. Below are a few examples of **community-wide CESP** visions. Notice that they show a range from very broad and general statements to more-specifically energy related.
- Vision statements for a **local government CESP** can also be aspirational – for example: “Lee County is a leader in the provision of energy efficient, responsible, and cost effective operations”– *Lee County, FL.*

BROAD	We want Austin to be the most livable community in the country – <i>Austin, TX</i>
	Reduce climate change impact, and become the renewable energy capital of Canada – <i>Toronto, ON</i>
	Albany is a model of community health and sustainability in its planning, restorative development, and conservation of energy, water, and natural resources – <i>Albany, NY</i>
	Assuring reliable, affordable, and clean electricity is essential to the continued attraction and retention of [New York] businesses and residents – <i>New York, NY</i>
SPECIFIC	Montpelier and its neighboring communities will be leaders in creating an economically sustainable and environmentally responsible community reducing fossil fuel consumption by at least 80% by 2030 – <i>Montpelier, VT</i>



Troubleshooting a stalled vision discussion:

- Avoid editing minutia.
- Engage key Leadership Team members to drive the discussion to conclusion.
- Use visual planning when possible so people can see the ideas being presented.
- It is impossible to make everyone 100% happy – remind the group there is no perfect vision.

After the Leadership Team has drafted the vision statement, it will be circulated among key stakeholder representatives for feedback. The Leadership Team will then make any necessary revisions and finalize the vision statement, with sign off from the Champion.

Share the Final Vision with the Broader Community

Once finalized, the Leadership Team can roll out the vision statement to the broader community in a highly visible way, to create momentum for the rest of the planning project. Highlighting the statement in communications can foster awareness of the vision, codify it, and build buy-in towards its achievement across government departments and/or sectors of the community. Keep the vision front and center in all aspects of work and life by:

- Making the vision statement a primary component of all communications and processes related to the rest of the CESP development;
- Including the vision as a tagline along letterhead, mailing envelopes, websites, municipal utility bills, and any other materials used to routinely communicate to the CESP's constituencies (i.e., government staff or the broader community);
- Asking staff to add the vision statement to their email signatures; and
- Incorporating the vision statement into recruitment materials and job performance criteria – make this a vision that inspires day-to-day thinking and activities.



Even if the CESP is focused primarily on planning for local government operations, sharing this vision with the public, along with information on the CESP as it develops, will provide taxpayers a picture of how their dollars are being spent and build support for the process.

Tools

[Tool 3.1: CESP Vision Development Worksheet \(.docx\)](#)



STEP 4: ASSESS THE CURRENT ENERGY PROFILE

WHAT: An energy profile maps out a jurisdiction's present energy landscape, including:

- Current and projected future energy use and supply data;
- An inventory of existing energy-related activities, projects, programs, and policies; and
- Information on available human and organizational resources to help implement a CESP.

A summary of findings and conclusions from this assessment, along with sections on the outcomes from previous steps, will be published as an Energy Profile.

WHY: In order to develop a CESP that will achieve the energy vision articulated during Step 3, you need to know where you are. The goals, strategies, and actions to be identified in later steps will be most effective if they are informed by and built on current energy use data and the existing organizational and policy framework. This will ensure that the plan is focused on true gaps and/or needs and that the actions identified are attainable. The current situation will also serve as the baseline for measuring future progress.

WHO: This step will be led by the Plan Manager and Leadership Team. Unless the planning effort is very small, the Team will likely need to identify and recruit additional internal or external expertise to help gather and analyze the necessary data (see discussion below).

HOW: To describe the energy framework, the Leadership Team will need to:

- Develop the Scope and Recruit Expertise for the Energy Profile Work
- Assess Current Energy Use and Supply
- Identify Potential Future Energy Supply
- Inventory Current Local, State, Regional, and Utility Policies, Plans, Projects, and Programs
- Identify Available Human and Organizational Resources
- Organize and Communicate Findings

WHEN: Develop the energy profile at the beginning of the CESP process, before setting goals and identifying strategies and actions. This step can be accomplished in as little as a few weeks or take up to several months, depending on the scope of the plan and profile and size of the jurisdiction. To avoid a major time lag for this step, the Plan Manager and Team can start identifying resources and gathering information for the profile early on, in parallel with Steps 1-3.

Develop the Scope and Recruit Expertise for the Energy Profile Work

Define the Scope of the Profile

Determine the level of detail for this inventory up front. Detailed information is useful, but is not always necessary for some levels of decision making. Receiving additional information often involves additional costs and more data collection and/or estimation tasks. Therefore, more-detailed information on energy use should be acquired only if it adds real value to the decision-making process.

CESP Timeline

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A high-level approach to an energy inventory builds from the top and provides an overall idea of total energy use and a good understanding of policies and available resources.

- This type of analysis usually aggregates information on energy consumption by end-use departments or sectors. For example, energy consumption can be categorized into sectors such as residential, commercial, transportation, and agricultural.
- Examples:
 - **Local government CESP** – one year of data for total energy use based on billing analysis and broken out by departments or management groups;
 - **Community-wide CESP** – one year of data for total energy use by sector based on utility annual report overview; simple transportation overview.
- Value of a high-level approach:
 - Largest areas of opportunity and saving will be evident.
 - Will illustrate commonalities – can identify similar cities who many have already implemented their plans and can offer some lessons learned.
 - Easy and inexpensive to update every year – gives a useful picture for ongoing monitoring.
 - Will take less time and expertise to undertake.
- Drawback: less useful as a specific management tool for focused activities such as building energy management.

A detailed analysis collects very specific information at the building (or facility) or even equipment level. It might include: building energy modeling; extensive stakeholder interviews; and information from multiple years.

- This type of analysis breaks information on energy consumption down into sub-sectors – such as by building type, transportation sector, or even by end use (lighting, HVAC, etc.); employs detailed analytical tools and technical expertise.
- Examples:
 - **Local government CESP** – include extensive benchmarking for buildings and facilities; undertake more-complex transportation analyses.
 - **Community-wide CESP** – break out energy use by building or economic type within sectors.
- Value of a more-detailed approach:

- Provides facility-level information to target specific projects to include in the plan; provides more granular benchmarks to track progress and verify savings.
- Identifies market segments for targeted community programs.
- Drawback: More expensive and time-intensive to undertake.

A **mixed approach** is often appropriate – do high-level reviews for most areas, with detail analyses for sectors that are sure to be included; or defer detailed analyses like benchmarking or targeted community sector analyses until policies, programs, or projects that will need close monitoring have been identified.

Identify and Recruit Expertise

The Leadership Team should establish a task force, research team, or subcommittee charged with developing the profile. This task force will be overseen by the Leadership Team and managed by either the Project Manager or another leader identified as part of the group. For a large plan, different components of the profile (see sections below) will benefit from different work groups with specific expertise.

Depending on the amount and specificity of the information needed to develop the energy profile, recruiting additional expertise to participate on the task force and assist in the work will be helpful. Look in the following places for help:

- For a local government CESP:
 - Representative from the jurisdiction’s Department of Public Works (DPW) or facilities manager – they will help find information or provide referrals
 - Analyst with computation skills to help compile and analyze the data
 - Employees with financial information – from budget or finance department
 - The task force may need reach out to other stakeholders for additional information, so be sure to have someone in the group who is familiar with all government offices and expertise. Help from the local utility companies will be particularly beneficial, as they will provide much of the energy use data as well as information on forecasts, programs, and policy.
- For a **community-wide CESP**: in addition to the above, be sure to have committee members with the right expertise and/or connections to:
 - Electric and gas utilities.
 - Large energy consumers (or business groups such as trade associations, Chamber of Commerce).
 - Institutions (e.g., higher education organizations, large office complexes, hospitals).
 - Broad community interests.

This information-gathering effort can draw from a very broad set of participants if plan is extensive – For example, the City of Knoxville, Tennessee, acknowledged the following groups as assisting with the development of its energy inventory and report:

“...Staff from each department within Knoxville City Government, the Energy & Sustainability Task Force, Knoxville Utilities Board, the Tennessee Valley Authority, Knox County, the Public Building Authority, the Metropolitan Planning Commission, Knoxville Area Transit, the Transportation Planning Organization, Chestnut Ridge Landfill, Lenoir City Utilities Board, Southern Management Group, and East Tennessee AAA.”

This step will require substantial effort. When appropriate:



- Look for pro bono help with analysis from local stakeholders (interns or college/ university expertise).
- Use this part of the project as a professional development opportunity for one of the local government’s financial analysts or junior engineers.
- Hire consultants in cooperation with surrounding communities..

Assess Current Energy Use and Supply

One of the most important parts of the energy profile is a clear assessment of what kind of energy is used and how it is used within the jurisdiction. In order to develop a CESP that will achieve the energy vision articulated during Step 3, it is important to know where the community is now. Then goals, strategies, and actions to be identified in later steps can be informed by and built on the current energy use and supply data. This will ensure that the plan is focused on true gaps and/or needs and that the actions identified are attainable. Gathering and evaluating this information also provides a baseline for measuring future progress. The information below is provided as guidance on what information to collect, where it can be found, and how it can be aggregated.

Data Sources for Information on Current Energy Use (Baseline)

High-level Information – Government Buildings

- Ask the Department of Public Works (DPW) or Finance Manager for a summary of the past year’s fuel and utility bills for all of the local government’s buildings, along with building size information, and calculate energy use per square foot. If energy bill management is more decentralized your jurisdiction, you may need to work with individual departments or your local utility to obtain this information.
- Convert various fuel usage data to a standard unit (typically Btu) to compare across type.
- Relevant metrics are provided in the table below. It is often appropriate to standardize use and cost by building or department, as budget authority will be at this level.
- Aggregate into collections of buildings, departments, campuses, etc. if they will be managed together.

Metric	Electricity	Natural Gas	Heating Oil	Propane/Other (Wood, etc.)
Cost	\$/Yr	\$/Yr	\$/Yr	\$/Yr
Energy Use	kWh/Yr	Therms/Yr	Gallons/Yr	Gallons/Yr
Conversion	Convert to MMBtu	Convert to MMBtu	Convert to MMBtu	Convert to MMBtu
Building Area	Total sq ft	Total sq ft	Total sq ft	Total sq ft
Standardized Use	MMBtu/sq ft	MMBtu/sq ft	MMBtu/sq ft	MMBtu/sq ft
Standardized Cost	\$/sq ft	\$/sq ft	\$/sq ft	\$/sq ft

High-level Information – Other Government Facilities and Infrastructure (Wastewater, Streetlights, Landfill, etc.)

- Ask the DPW Manager what other functions the local government has that consume energy resources, such as wastewater, streetlights, landfills, etc.; if necessary, ask for a referral who can help provide information on the past year’s usage.
- Collect the same information as for buildings – calculate energy use per facility or department.

High-level Information – Government Vehicle Fleet and Other Transportation

- Ask the DPW for the past year’s diesel consumption, gasoline consumption, and miles traveled for the local government’s fleet vehicles, and calculate the fleet average miles per gallon. Be sure to include off-road vehicles, such as snow plows, mowers, etc.
- Relevant metrics are provided in the table below. It is often appropriate to standardize use and cost by department.
- Aggregate into collections of vehicles or equipment if they will be managed together – by department or other budget-line division.

Metric	Diesel	Gasoline	Natural Gas
Cost	\$/Yr	\$/Yr	\$/Yr
Volume	Gallons/Yr	Gallons/Yr	Gallons/Yr
Distance	Miles/Yr	Miles/Yr	Miles/Yr
Standardized Use	Miles/Gallon	Miles/Gallon	Miles/Gallon

High-level Information – Broader Community Buildings

- Ask the DPW Manager or finance department to provide a referral to the local government’s key account manager(s) for the local utility(s). Ask these account managers for the past year’s energy usage for the jurisdiction’s zip code(s) by market sector – residential, commercial, institutional, and industrial.
- Collect census information from local government offices or the U.S. Census Bureau Fact Finder to search for specific local information. (<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>)
- Ask appropriate stakeholders for additional data they think will be helpful – commercial or institutional facility managers; school district financial officers; large industrial users’ trade association; renewable energy vendors; homebuilders. Information on heating oil, propane, and other fuels will come from fuel dealers’ trade associations.
- Relevant metrics: collect the same metrics as for government buildings if possible.
- When appropriate, aggregate by sector – residential, commercial, institutional, and industrial. Pull out information on specific businesses or institutions, etc., if they will have separate targets set as part of the plan.
- Per capita information will be useful in some instances: for example, comparing energy use in low-income vs. non-low-income residences.
- Parcel-level data are also very helpful here. From U.S. Energy Information Administration (EIA) information (see below), it is possible to put together a profile of the types of properties that would most benefit from energy efficiency, and then parcel-level data can show the prevalence of these property types within a certain jurisdiction.

High-level Information – Broader Community Transportation

- Check with the city and state’s transportation departments and any Regional Planning Associations for recommendations on data sources and appropriate questions to answer.
- Three broad variables are related to transportation energy use:
 - Number and efficiency of vehicles – check with the state Department of Transportation.
 - Transportation fuels (consumption and cost) – check with the State Energy Office.
 - Travel behavior (vehicle miles traveled (total and per household), choice of transportation mode, etc.).
- These resources are also often useful:

- U.S. Census Transportation Planning Products (www.fhwa.dot.gov/planning/census_issues/ctpp/)
- National Cooperative Highway Research Program (NCHRP) (www.trb.org/NCHRP/NCHRP.aspx)
- Center for Neighborhood Technology Housing and Transportation Index (<http://htaindex.cnt.org/>)

Other Sources for High-level Information on Energy Use

- Regional Planning Associations
- State Energy Office and/or Public Utilities Commission: information by local area
- EIA:
 - State Energy Profiles – national, state, and limited local electricity data on production, consumption, cost, and expenditures (www.eia.gov/state/)
 - Building-specific energy information – summaries of typical building categories (residential, commercial) and the types of energy they use (www.eia.gov/consumption/residential/, www.eia.gov/emeu/cbeecs/)
 - Petroleum section - national, state, and limited local fuel data on production, consumption, cost, and expenditures (www.eia.gov/petroleum/)

Compile this information together for decision support analysis and communication. The **Energy Data Calculation and Summary Tool** at the end of this chapter offers a worksheet for collection of summary energy use information across sectors and prepares simple pie charts to illustrate relative contributions to total energy use.

To identify additional trends over time, consider going back further and gathering data from previous years as well. Looking ahead, once the CESP has been completed, plan to perform this kind of high-level review on an annual basis to track changes over time. This may be incorporated into your monitoring plan discussed in Step 9.

Detailed Assessment Example – Energy Benchmarking for Government Buildings

Developing benchmarking information for local government buildings defines the current level of energy use at a detailed level. Energy and financial savings from individual projects are hard to detect in aggregated data – benchmarking can establish the appropriate level of detail necessary to identify impacts and compare similar buildings. Benchmarking also:

- Facilitates energy accounting.
- Provides a baseline to use when assessing future success.
- Provides a standardized level to use in comparing a facility's energy use to similar facilities in order to assess opportunities for improvement. For example, buildings or fleets that score low during the benchmarking process can make excellent initial projects that are sometimes quick and often very cost-effective.
- Delivers useful data for quantifying and verifying energy savings.
- Assists in continuous energy management practices by tracking energy use on an ongoing basis.

The following tips will help in benchmarking government buildings:

- Ask the Department of Public Works (DPW) or Finance Manager for energy fuel use data (such as utility bill information) for each government building along with building size information. If energy bill management is more decentralized in your organization, you may need to work with individual departments or your local utility to obtain this information.
- Work with personnel such as IT staff, office managers, or facility managers to collect building operating characteristic data.

- Convert various fuel usage data to a standard unit (typically Btu). Calculate the energy use intensity per square foot. These steps can be done with the aid of the **Energy Data Calculation and Summary Tool** and/or a benchmarking tool such as ENERGY STAR Portfolio Manager.
- Track the energy use for all fuel types at each facility and update for continued energy monitoring and analysis.
- Coordinate with the energy profile task force to ensure all facilities are accurately defined and the associated meter data is collected. Delegate data collection tasks as necessary.

There are excellent publicly available tools to assist with benchmarking efforts.

- U.S. Environmental Protection Agency’s (EPA) Portfolio Manager – a free tool and set of extensive resources designed to help with:
 - Rating building energy performance.
 - Comparing across portfolios of buildings.
 - Setting investment priorities.
 - Verifying and tracking progress of improvement projects.
 - Gaining EPA recognition for superior energy performance.

Find more information at: www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager

- Other places to find benchmarking resources and tools include:
 - Lawrence Berkley National Lab – <http://energybenchmarking.lbl.gov>, including Energy IQ – <http://energyiq.lbl.gov>.
 - Seek out colleagues in other cities or within the American Public Works Association.

While individual building benchmarking has these obvious advantages and is a practice encouraged for internal energy management, it can be more expensive and time consuming to undertake if it is not currently being implemented in across government facilities. Planners often decide it is more efficient to defer benchmarking until the CESP identifies areas for this level of concentrated focus.

Data Sources for Information on Current Energy Supply

Energy vision statements often include aspirations to move toward a more sustainable energy mix. In order to assess the potential for more renewable energy development, achieve cost savings from different fuel sources, enhance fuel source and cost stability, and realize greenhouse gas reductions, it is important to know where current energy comes from. Understanding the associated costs, risks, and benefits of various energy sources can help prioritize areas of improvement and investment.

Identify **energy sources currently available** and information about **costs, advantages, and problems** with these sources. Potential **sources for current energy supply** information include:

- Ask your jurisdiction’s electric utility key account manager for the most recent year’s report on the source of their fuel supply.
- Regulated energy (electricity, natural gas) – ask utility companies and the State Energy Office for the most recent information on generation, loads, rates, and any issues with current or future system reliability.
- Unregulated heating fuels – interview local fuel dealers or collect information from fuel dealers’ associations; contact the state’s department of forestry for wood-product fuels.
- Local energy generation from renewable energy – gather information from utility companies, the State Energy Office, and local renewable energy dealers and associations.
- Transportation fuel sources – check with the State Energy Office and Department of Transportation.
- EIA web site – the State Energy Data System (SEDS) has good summary information that can serve as a proxy for more-local data. www.eia.gov/state/seds/

When collecting data by interview, be sure to ask about costs, advantages, and problems with these energy sources. Assess whether the current supply mix **fits with the CESP vision**.

Identify Potential Future Energy Supply

Identify where energy will come from in the future in order to better understand the future energy mix and assess the potential for renewable sources as an option. Assess whether this potential future supply mix **fits with the vision**.

Potential **data sources** for **future energy supply** forecasts – these will be high-level estimates:

- Ask the local electric utility for their long-term forecast of electricity requirements and the types of power plants (and fuels) expected to provide energy.
- Ask the local gas utility for their long-term forecast of natural gas requirements and the source (supply basin) where the gas is produced.
- Contact the Transportation Authority and/or State Highway Department and ask for their long-term forecast of vehicle miles traveled, average vehicle efficiency trends, and fuel source trends.
- Review your state’s most-recent energy plan.

Inventory Current Local, State, Regional, and Utility Policies, Plans, Projects, and Programs

Patterns of energy use are molded by current policies, programs, and projects in the local jurisdiction, as well as by other plans already in place. Becoming familiar with this landscape allows a more comprehensive understanding of these factors and helps identify ways to shape energy use in the future.

Compile an inventory of existing government (local, regional, and state), community, and utility activities. An **Inventory of Existing Energy Activities Template** has been included at the end of this chapter to assist you with this. **Data sources** for **energy policy, program, and project** information and **other jurisdictional plans** will include:

- Local government sources:
 - Planning Department
 - Department of Public Works and Department of Transportation
 - Mayor’s Office
 - City/County Attorney
 - City Council/ Select Board/ County Commissioners
 - Budget and procurement offices
- Regional- or state-level sources:
 - Regional energy efficiency organizations
 - Regional planning entities
 - State energy office
 - State transportation office
 - State public utilities commission
 - State office of consumer advocate and/or people’s counsel
- Utility programs and incentives: Contact local utilities or energy efficiency and renewable energy program administrators to find information on current program offerings. Ask about the participation and impact of these programs, challenges, and plans for the future.

- Broad policy databases:
 - Database of State Incentives for Renewables and Efficiency – DSIRE provides extensive listings of state, regional, and local policies and programs for energy efficiency and renewable energy (www.dsireusa.org)
 - ACEEE's State Energy Efficiency Policy Database (www.aceee.org/sector/state-policy)
 - DOE's Alternative Fuels Data Center – provides state-by-state information for transportation incentive, laws, prices, and infrastructure location (www.afdc.energy.gov/states/)
- Other stakeholders – At every stakeholder interview or meeting, ask about energy-related activities, projects, policies and programs that already exist: How did they come to be and what is their history and reputation?

Identify Available Human and Organizational Resources

Developing a good understanding of who does what within the jurisdiction will help identify current activities that affect energy use and recruit help to define and implement CESP activities going forward. The objective is to identify those people and organizations that will become local champions of the CESP vision and contribute to its success, as well as to understand challenges that may arise so they can be addressed.

Use the following strategies to gather stakeholder input on available **human and organizational resources**.

- Ask at every stakeholder interview or meeting for information on what they can contribute.
 - Solicit specialized expertise from stakeholders – especially from government department heads or staff who are focusing on energy improvements: individuals, elected officials, or organizations that bring appreciable skills and perspectives.
 - Be sure to assess resources from non-energy-related local government departments – they may have instituted activities that complement the CESP.
 - Housing and Urban Development Office – for example, using ENERGY STAR in buildings
 - Zoning and Permitting Office
 - Planning Office
- Ask for help from organizations with parallel interests – take advantage of potential common interests driven by complementary goals. For example:
 - Non-profit organizations
 - Local weatherization agencies
 - Economic development organizations
 - Private sector organizations (e.g., energy service companies, third party providers, lenders)
 - Utility-administered energy efficiency programs
- Identify relevant resources from local schools, colleges, and universities – for example: student researchers and interns to assist with appropriate tasks; relevant research (such as transportation research).

As the Leadership Team begins to shape ideas for the plan, it is useful to think about the internal and external factors that are favorable and unfavorable to achieving the goals that will be set. It can be worthwhile at this stage to undertake a **SWOT analysis** – a planning exercise intended to identify internal and external factors that will enable or inhibit successful execution of CESP initiatives.

Using the **CESP SWOT Analysis Worksheet** at the end of this chapter, meet with the Leadership Team and stakeholders who will have useful insights, to identify:

- **Strengths** – existing resources that can be used to attain the vision, including: tangible resources (stable funding, a community organization in place to drive transportation improvements, an effective energy tracking system) or intangibles (leadership or community mindset).
- **Weaknesses** – barriers or constraints that must be addressed to move the plan forward, including small obstacles (limitations on project development from cumbersome permitting processes) as well as obvious disadvantages (limited funding).
- **Opportunities** – external trends, conditions, or events that can be leveraged to support the plan initiatives, such as opportunities for federal funding, or rapidly lowering prices for solar systems.
- **Threats** – external challenges that might impede or limit implementation, such as protracted economic downturn or reduced utility financial support for EE projects.

Pull together a summary of what the SWOT analysis indicated, including highlights of strengths and opportunities, as well as ideas for overcoming opposition. Include this information in the conversation as goals are developed (Step 5).

Organize and Communicate Findings

The information collected during the assessment will inform goal and strategy setting (Step 5), as well as the identification of actions for the CESP (Step 6). High-level findings make an effective first cut as areas for goal development – current success stories can be replicated, and clear trouble spots are opportunities for improvement. The findings will also provide clear information for the public about the current situation and be useful in engaging them in future steps.

While the energy profile results will become a key part of a broader CESP final report (Step 10), publishing a summary of findings and conclusions from this work into an Energy Profile at this stage has several advantages. As noted, this is important information to provide at goal-setting meetings – so a preliminary profile report specifically for use in setting goals and establishing actions for the CESP is a good idea. In addition, if the CESP process will take an extended period of time, providing this information to stakeholders and the broader public as an interim deliverable provides a progress report on the planning.

An Energy Profile may include the following sections:

- Executive Summary
- Stakeholder Engagement Process
- Energy Vision
- Energy Profile
 - Key Facts
 - Current Energy Use and Cost
 - Projected Future Energy Use and Cost
 - Related Efforts Underway (in the Community)
- Gaps & Challenges
- Next Steps for the CESP Process

Charts, graphs and pictures say a thousand words – information should be graphed or charted in a summary format that is easily communicated to others. Be sure to cite sources so results are defensible. Websites and newsletters are good places to distribute this kind of information to the broader public. Be sure as well to share with:

- Both the legislative and executive branches
- Every stakeholder that was engaged in the process of creating the report
- Conferences, public meetings, and other public outlets – to promote the results.

Examples of effective presentation of energy profile information:

- Knoxville (TN) Energy Inventory www.cityofknoxville.org/sustainability/Knoxville_Energy_Inventory.pdf
- Omaha (NE) Energy Profile (part of Omaha’s Energy Plan) www.omahaenergyplan.org/index.php/energy-profile
- Berea (KY) Energy Inventory Report: Base Year 2010 (part of Berea’s Energy Cost-Savings Plan) http://bereaky.gov/wp-content/uploads/2011/12/BECS_Data_small_PDF1.pdf
- Bloomington (IN) 2010 Local Government Operations Energy Use and Emissions Inventory <http://bloomington.in.gov/media/media/application/pdf/11987.pdf>
- Annapolis (MD) Energy Consumption and Greenhouse Gas Emissions of the Facilities and Operations in Fiscal Year 2006 www.annapolis.gov/Government/Departments/DNEP/Sustainability/EnergyInventoryFinal.pdf

Tools

[Tool 4.1: Energy Data Calculation and Summary Tool](#) (.xlsx)

[Tool 4.2: Inventory of Existing Energy Activities Template](#) (.xlsx)

[Tool 4.3: CESP SWOT Analysis Worksheet](#) (.docx)

Resources Recommended for More In-depth Guidance

- DOE Energy Data Management Portal www1.eere.energy.gov/wip/solutioncenter/portfolio_manager_initiative.html
- DOE Guidelines for Retrieving Customer Usage Data from Utilities (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/guideline_for_retrieving_customer_usage_data_from_utilities_slides_12-16-10.pdf
- DOE Clean Cities Transportation Tools (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/clean%20cities%20web%20sites%20and%20web%20tools.pdf
- EPA Local Climate and Energy Program – Developing a Greenhouse Gas Inventory www.epa.gov/statelocalclimate/local/activities/ghg-inventory.html



STEP 5: DEVELOP ENERGY GOALS AND STRATEGIES

WHAT: Informed by the results of the energy profile, tangible long-term goals and nearer-term strategies provide a pathway from the conceptual energy vision to concrete, cost-effective actions.

WHY: Clearly defined goals and strategies will form the framework for the rest of the plan's design and guide decisions about what actions (including policies, programs, and projects) will be proposed. Goals and strategies also help to communicate the specific value of efforts to key audiences and provide a basis for tracking and measuring progress.

WHO: This part of the CESP effort will be led by the Leadership Team, who will develop draft goals and strategies based on the vision, earlier stakeholder input, and results of the energy profile. Preliminary proposals will be shared with stakeholders for comment and discussion, the Leadership Team will revise, and the Champion will approve the final goals and strategies.

HOW: During this phase of the planning process, the Leadership Team will need to:

- Choose Effective Goal Language
- Develop Clear and Measurable Goals
- Identify Strategies for Achieving Goals
- Integrate Input from Stakeholders
- Publicize Goals and Strategies

WHEN: Plan to establish goals and strategies as soon as the energy profile is completed. The energy profile will help identify areas for improvements and efforts to build on, so goals and strategies should flow from those. This is a big step – if extensive stakeholder involvement is needed, it can take considerable management to collect and synthesize input – but try to keep it to 4-6 weeks. Accelerate the process by providing drafts for parties to react to, rather than starting from scratch.

Choose Effective Goal Language

Energy goals represent high level, medium- to long-term targets, often for broad energy use sectors or government jurisdictions that will move the community toward its vision. To be most effective, goals should articulate broad targets or behaviors desired for the future and identify what must be accomplished.



CESP Timeline

Step 1	Form Leadership Team										
Step 2	Identify Stakeholders	Engage Stakeholders									
Step 3	Vision										
Step 4	Energy Profile										
Step 5					Goals and Strategies						
Step 6					Identify Actions						
Step 7					Identify Financing						
Step 8									Implementation Blueprint		
Step 9									Monitoring Plan		
Step 10					Scope and Develop Final CESP					Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10	

Goals are most valuable if they are easy to communicate and clear to follow. Develop the CESP goals in the form of “SMART” goals:

- **Specific** – Ensure goals are clear and have enough detail that what it will take to meet them is easy to understand. For example: “Reduce energy use, **both electric and fossil fuel**, in Smallville’s **municipal buildings**”.
- **Measurable** – Ensure there is a way to assess whether the goal has been met. For example: “Reduce energy use, both electric and fossil fuel, in Smallville’s municipal buildings **by 20% over 2009 levels**”.
- **Attainable** – Establish goals that are a stretch to achieve, but be sure they are feasible – not unrealistic or unachievable.
- **Relevant** – Make sure that goals are in line with and will provide progress toward the community’s vision as outlined in Step 3.
- **Time-bound** – Specify a clear timeframe for completion. For example: “Reduce energy use, both electric and fossil fuel, in Smallville’s municipal buildings by 20% over 2009 levels **by 2020**.”



SMART energy goals are commonly framed in the following way:

“By ____ (target year), (locality) will ____ (increase/reduce) ____ (resource) by ____ percent below ____ (base year) levels.”

Develop Clear and Measurable Goals

The Leadership Team will draft preliminary goals and strategies to use as basis for discussion and input from stakeholders. Not all goals will fit exactly into the template above. Choose types of goals and set levels of targets that relate best to the sector of focus and the means of achieving them. Plans usually contain more than one kind of goal – combine different goals in different “topic areas” that support the vision.

- Include a “headline” goal to describe an overall target. For example:
 - “Make all City of Austin facilities, fleets, and operations totally carbon neutral by 2020.” *City Council of Austin, Texas*
 - “Reduce total, current, community-wide fossil fuel consumption by 50% by 2030.” *Climate and Energy Action Plan, City of Eugene, Oregon*

- “Achieve 80% reduction in greenhouse gas emissions...by 2050, using baseline data from 2005.”
Climate Action Plan, City of Lawrence, Kansas
- Delineate goals by energy use sector and/or agency jurisdiction, and set one or more high-level goals for each category that resonates. For example:
 - *Local government CESP* – Government buildings, other operations, transportation expenditures
 - *Community-wide CESP* – Buildings (residential, commercial, and industrial) and community-wide transportation

Be sure to frame goal statements so that they provide a basis for understanding progress.

- Frame goals in terms that are **related to local priorities**. For example, if the vision seeks to attain:
 - Monetary/cost savings (energy use translated into savings), frame goals in terms of dollars.
 - Economic development and job creation, frame goals in terms of jobs created or new businesses attracted.
 - Energy reliability and security, frame goals in terms of energy dollars spent locally, or of locally generated energy.
 - Environmental benefits, frame goals in terms of reduction in greenhouse gases, or clean energy projects built.
- Frame goals by **how progress will be measured** and recognized (the metric or key indicator to be monitored). For example:
 - Attain a defined reduction (actual or %) in a given metric (e.g., cost savings, kWh, vehicle miles traveled, fossil-fuel consumption)
 - Attain a defined increase (actual or %) in a given metric (e.g., job growth, use of renewable energy)
 - Become the best-in-class – highest per capita participation in utility energy efficiency programs in the state, lead the state’s list of cities with the most ENERGY STAR certified buildings
 - Show general improvement or shift – attract, develop, and retain a high-performing municipal workforce, shift toward renewable resources (metric = comparative change from baseline)
 - See changes in behavior – citizens actively participate in city-wide energy activities and programs



There are advantages of adopting energy-related goals that incorporate or address other community needs. Such shared outcomes can help establish support for the plan’s elements. For example: Increased transit ridership saves energy and reduces traffic congestion; saving energy in school buildings will increase available budgets for other expenditures, such as teacher salaries.

Decide at what level targets should be set.

- The “right” level depends on the nature of the government or community, how it uses energy, and the potential for change.
- Review the energy data from Step 4. They will provide information on trends, performance, opportunities, and needs, all of which can help identify a reasonable rate for future progress.
- Evaluate past projects and best practices of higher-performing facilities or programs to determine the feasibility of transferring these practices to other parts of the government operations or community.
- Review goals of other similar jurisdictions to assess potential for your community or operations.
- If appropriate, sign on to regional, state, and national initiatives – they will often provide structure, support, and technical assistance, along with an appropriate target range. For example, the DOE Better Buildings Challenge encourages building owners to “**Reduce energy use across building portfolios by 20% by 2020**”. Support is provided through technical assistance and proven solutions to energy efficiency, a

forum for matching Partners and Allies to enhance collaboration and problem solving in energy efficiency, and recognition for leadership and innovation.

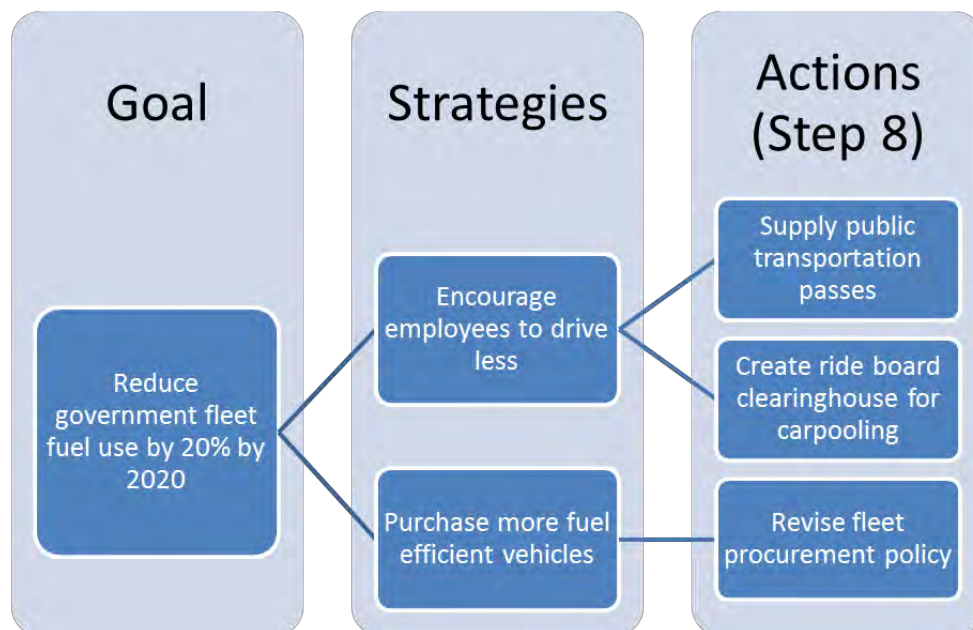
Once all the goals have been established, check that they are collectively appropriate, and be sure that they work well together.

- Take a look at the collective goals and map them to the vision. If met, will they result in the future outlined in the vision?
- Do a quick reality check on goal levels – stretch goals are good for motivation, but they should be kept attainable. To consider this, ask:
 - Roughly, what would it take to attain the target(s), in terms of: cost, total participation, political will?
 - Are they achievable based on what the government (and community) can realistically control?
- Be sure that multiple goals are congruent – that they combine well with each other. Does goal A appear compatible with goal B? Do they fit together to form a unified overall approach?
- "Goal hierarchy" consists of the nesting of one or more goals within other goal(s). This can be an effective way to stage actions.
- There are advantages to having a mix of short-term, medium-term, and long-term goals.
 - Short-term goals should be fairly easy to attain: they stand just slightly above one's reach. At the other extreme, long-term goals appear very difficult to attain, but motivate sustained efforts. Having both allows for some early success stories while still providing substantive achievements.
 - Interim goals are also an effective way to manage expectations and stage activities.

Reviewing goals set by others can help broaden the options considered. Find sample goals in the example plans listed in Resource Section of the Introduction.

Identify Strategies for Achieving Goals

As illustrated in the example below, goals provide high-level targets in terms of broad categories, while strategies provide more-detailed sub-goals or objectives that begin to break down the goal into focused and measurable components.



Strategies are designed to articulate the specific approaches that collectively will achieve the goals. For example:

- For a **local government CESP high-level goal** designed to reduce energy use in buildings (by X% by 20xx), strategies to meet the goal might include:
 - Upgrade X% of government buildings to ENERGY STAR levels;
 - Purchase all energy-using equipment based on lifecycle cost-effectiveness rather than lowest first cost; and
 - Reduce unnecessary energy use in government buildings.
- For a **local government CESP high-level goal** designed to reduce energy used by transportation in government operations (by X% by 20xx), strategies to meet the goal might include:
 - Reduce average energy use in the City’s fleet by X% by (target date); and
 - Reduce vehicle miles traveled by City fleet and employees.
- For a **community-wide CESP high-level goal** designed to increase the efficiency of homes in the community (by X% by 20xx), strategies to meet the goal might include:
 - Ensure all new homes are as efficient as possible by adopting the most-current residential building codes; and
 - Assure that X% of existing homes have participated in Home Performance with ENERGY STAR programs by (target date).
- For a **community-wide CESP high-level goal** designed to increase the efficiency of commercial buildings and industrial process in the community (by X% by 20xx), strategies to meet the goal might include:
 - Ensure all new commercial buildings are as efficient as possible by adopting the most-current C&I building codes;
 - Motivate improvement of the C&I building stock by X% by (target date);
 - Support renewable energy generation in appropriate locations; and
 - Motivate energy conservation in businesses and institutions.
- For a **community-wide CESP high-level goal** designed to decrease the energy used by transportation in the community (by X% by 20xx), strategies to meet the goal might include:
 - Motivate community members to reduce per-capita gasoline consumption by X% by (target date);
 - Increase availability and motivate increased use of alternative means of transportation; and
 - Motivate reduced vehicle miles traveled in community transportation.

The same basic rules of thumb for **effective goal statements** hold for statements of strategy as well, so use the same structure as a goal statement when possible, including guidance discussed above for:

- SMART goals, to give measurable targets; and
- Framing – relate strategies to the goals they will support and frame them in terms of how they will be measured.

Ideas for identifying strategies can also come from the energy assessment – review the result of the profile prepared in Step 4 and target areas with:

- Highest impact to savings in energy and/or costs.
- The most room for improvement in energy and/or costs.
- Great success – do more of what you know works!
- The most government and community strengths and resources.
- Connections to other community priorities (e.g., job creation, education).

- Opportunities to make changes easily – early successes are good publicity.

For additional examples of goals and strategies that support them, see those from Topeka, Kansas, which are provided as an example in the **Goals, Strategies, and Actions Planning Worksheet** at the end of this chapter. This Worksheet can be used to support the development of goals and strategies.

Once draft goals and strategies have been developed, prioritize them by time and effort to achieve.

- Immediate, short-term goals and strategies are those that can be achieved quickly – usually with internal, current resources.
- Longer-term goals and strategies will take more planning, resources, and time to achieve.

Integrate Input from Stakeholders

Once drafted and prioritized, the Leadership Team should share the proposed goals and strategies with stakeholders. Engage stakeholders early to hear their thoughts and ensure their backing, and take the opportunity to challenge stakeholders to think of how they could help support and advance these strategies. The Leadership Team should then revise goals and strategies as appropriate to reflect stakeholder input and assure broad buy-in, and the Champion will approve the final goals and strategies.



Local leaders – government, business, civic, environmental – who are engaged in the process of setting goals and choosing priorities are more likely to contribute to successful execution of the plan.

Publicize Goals and Strategies

Goals and strategies that kindle interest and excitement, and associated information on their potential benefits, are critical to capturing the public’s interest and stimulating their understanding of and involvement in the CESP. Keep goals and strategies, along with their potential benefits, visible as discussion moves to actual on-the-ground CESP actions – this helps keep discussion on target and builds momentum for implementing the plan.

Examples of effective ways to publicize goals:

- Provide the vision statement along with goals when communicating about objectives of the CESP – constituents can see how the goals will help reach the vision.
- Provide the following detailed information when presenting information about goals – this allows the broader public to understand why these goals were chosen and how they will lead to the future illustrated in the vision:
 - Goal statements
 - Assumptions: the challenges, priorities, and other underlying thinking that led to these goals
 - Strategies to meet the goals
 - Key indicators that will be tracked
 - Potential benefits for the community

CESP IN ACTION: BALTIMORE SUSTAINABILITY PLAN

The Sustainability Plan developed for the City of Baltimore provides a good presentation template for goals and strategies, with an indication of the priorities addressed for each. See the Resource Conservation section – starting on pg. 57 at:

www.baltimoresustainability.org/uploads/files/Sustainability_Plan.pdf

- Effective means of communication include:
 - CESP website
 - CESP update newsletter
 - Flyer with goals highlighted for broader circulation – internal and external

Tools

[Tool 5.1: Goals, Strategies, and Actions Planning Worksheet](#) (.docx)



STEP 6: IDENTIFY AND PRIORITIZE ACTIONS

WHAT: After finalizing energy goals and strategies, a list of potential actions to achieve them must be developed and ranked.

WHY: Goals and strategies will only be accomplished with concrete actions, but there are a wide range of policy, program, and project options a jurisdiction can choose from, so they must be broadly considered and then prioritized. Deliberately identifying and articulating the criteria and rationale for ranking these choices will:

- Assure a focus on relevant activities that will be effective in contributing toward goals,
- Provide guidance to those implementing the plan if future resources are constrained, and
- Help garner support from others.

WHO: The Leadership Team will drive this step, including establishing a ranking system and drafting a proposed list of actions, with the Plan Manager managing logistics. Stakeholders will provide input along the way, to help expand the list of potential energy actions designed to meet goals and to help prioritize these ideas. Including stakeholder input allows for the identification of a broader range of potential energy actions, provides stakeholders with a sense of ownership in the plan, and begins the necessary step of identifying responsible parties for implementing prioritized actions (addressed in Step 8).

HOW: To identify and prioritize effective actions for the CESP, the Leadership Team will need to:

- Establish a System to Rank Ideas
- Identify Policies, Programs, and Projects to Consider
- Rank and Evaluate Options against Goals and Strategies

WHEN: This step can be done in conjunction with goals and strategies development, as well as the research and interview stage of developing a financing strategy. As with Step 5, try to keep this to 4-6 weeks.

CESP Timeline										
Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5					Goals and Strategies					
Step 6					Identify Actions					
Step 7					Identify Financing					
Step 8									Implementation Blueprint	
Step 9									Monitoring Plan	
Step 10					Scope and Develop Final CESP					Adopt & Publicize
Month:	1	2	3	4	5	6	7	8	9	10

Establish a System to Rank Ideas

With input from key stakeholders, establish a system for prioritizing actions to include in the CESP. Without some evaluation of proposed actions, it is hard to know if those chosen will be effective in achieving goals. This system will also be critical for narrowing options for the CESP to a reasonable subset of all of the possibilities. Establish this ranking scheme at the start of the process so that ineffective and/or unrealistic activities can be set aside early on and conversations can more quickly hone in on true priority actions for your community.

Start with the goals and strategies developed in Step 5 to inform the ranking system. For example, if goals focus mainly on cost savings, use that as the key criteria for prioritization. Then use additional objectives identified to rank among prioritized actions.

For example, among actions that result in significant cost savings, those that also result in job growth or attract new business will rank higher if economic development has been identified as important.

Examples of common evaluation criteria include:

- Effectiveness in reducing energy use and related costs and/or savings.
 - Simple estimates are often sufficient for this. For example: percent change or categories of low-cost/highest-value actions.
 - Use more-quantitative calculations of cost-effectiveness for projects where the data are available, or when such information will be useful in the future for financing or monitoring an action. Methods could include rate of return or savings-to-investment ratio analysis for capital projects or total resource cost test for energy efficiency programs.
- Timeframe for implementation and payoff.
 - Prioritize those projects that can be achieved and maintained with current budget.
 - Start small and work up to other larger or longer-term activities with larger resulting savings. This strategy also gives success stories to build on early in the process.
 - Give value to the possibility for staging activities: Start with low-cost conservation activities that lead to savings and support for further activities to follow (e.g., cost-effective energy efficiency), then add renewable energy projects.
- Feasibility of activities, with consideration given to:
 - Existing institutional capacity or programs.
 - Ability to motivate those whose input or influence is needed to accomplish a given action.
 - Access to financing (will be discussed in Step 7).
 - Political realities.
 - Technological issues.
 - Existing legal constraints.
 - Enforceability.
 - Measurability.
 - Risks of success or failure.
- Co-benefits with other local priorities (e.g., social equity, economic development).

CESP IN ACTION: DENVER CLIMATE ACTION PLAN

In its Climate Action Plan, the City of Denver identified the criteria it used to choose between actions (page 17):

- Viability
- Cost-effectiveness
- Implementability
- Achievement of goals
- Engagement

Final elements of the plan are listed, with information on how they each affect these criteria (starting on page 22):

www.greenprintdenver.org/about/climate-action-plan-reports/

It is common to use some **combination** of criteria to capture the full scope of local priorities, and to add a weighting scheme to balance the importance of the most important items.

You will also need to choose between an objective or subjective ranking method for each type of criteria – ranking methods can be highly technical calculations or more-subjective assessments of impact. Both have their place.

- Technical calculations (objective)
 - Examples: estimates of cost, calculations of expected project energy savings, number of low-income households to be affected
 - Benefits: provide a very clear method for ranking
 - Challenges: often costly and time-consuming to develop, and hard to compare to actions that can only be assessed subjectively
- Qualitative evaluation (subjective)
 - Examples: ratings that fall into general categories (e.g., high/middle/low, first/later, critical/nice to have) rather than having specific values; or ratings that use subjective scoring on a scale (e.g., assign a value of 1-10 for how well a given action meets each ranking criteria).
 - Some criteria (e.g., political feasibility, access to financing, fit with other community concerns) may only have this type of answer
 - Benefits: easier and less expensive to assess, while still giving weight to options
 - Challenge: does not convey the same sense of technical rigor and is harder to combine rankings across several criteria

To help you start thinking about your system for ranking actions, a **Sample Scoring Form for Prioritizing Energy Actions** has been included at the end of this chapter.

Once a set of ranking priorities has been established, **keep them visible** and in front of all participants and stakeholders as they work to develop ideas for actions to include in the CESP.



No matter what methodology is used, impacts will be estimates at this stage, and no action is without uncertainty – but the process of screening options is still worthwhile. Still, keep in mind that since no ranking methodology will be able to predict the future, no matter how precise it, additional investment in highly quantitative analysis is not always worth the extra cost and time.

Identify Policies, Programs, and Projects to Consider

It is important to investigate a broad range of options for meeting goals and strategies at this stage to assure that the final CESP will use resources fully and effectively:

- Start by reviewing the energy profile from Step 4 – the current strengths, successful efforts, needs, and gaps identified there will all provide ideas for actions to meet goals. Focus on strengthening and building on existing activities (particularly those that have been successful) and addressing high-energy-using equipment, buildings, processes, or sectors of the community.
- Discussions during previous steps and stakeholders meetings will likely have identified options as well. Including activities that stakeholders have identified as of interest to them is more likely to lead to partnerships for implementation.
- A review of plans from other communities can also provide good ideas. A list of commonly used components of many energy plans has been compiled to help planners identify results-oriented items to discuss (see **Step 6 – Appendix**).

As the list of possibilities is developed, consider a mix of activities that fall into the categories identified below (**Step 6 – Appendix** organizes possible actions using these categories).

Type of Plan	Type of Activity	Purpose	Considerations
Projects and Activities for Local Government Plan	Low-cost Changes to Operations	Make efficient energy choices a day-to-day priority by institutionalizing through policy and procedures	Often driven by policy initiatives, these will require political resolve to implement and enforce
	Capital Projects	Make energy-saving investments in buildings, equipment, facilities, and fleet	One popular approach is to start with cost-effective/high-impact projects to build momentum and gain support, and then consider long-term energy savings – however, it is important to note that too much “cream-skimming” can make it difficult to get projects with longer payback periods done; to strike a balance, consider doing a limited low-hanging fruit project to “prove the concept,” and then move on to comprehensive energy improvements with a balance of short- and long-term paybacks
	Behavioral changes	Make efficient energy choices a day-to-day priority through changes to employee culture	Driven primarily through leading by example, education, and training, as well as employee policies
Government Activities to Influence and Leverage an Effective Community-wide Plan	Policies to Provide Framework for Community Action	Enable or streamline effective community actions toward energy saving	Often driven by policy initiatives, these will require political resolve to implement and enforce
	Low-cost Government-sponsored Activities to Influence Community Action	Invigorate the community and build on enthusiasm and actions already underway	Builds off of government's role as educator, facilitator, and community partner
	Government-funded Projects and Programs for the Community	Support, finance, or fund community programs or projects, to help develop local efficiency, renewable energy, and efficient transportation markets and support job development	Requires substantive financial investment; can leverage substantive community action

Rank and Evaluate Options against Goals and Strategies

Next, apply the ranking scheme that had been developed to the wide range of options identified. Then, revisiting the **Goals, Strategies, and Actions Planning Worksheet**, map draft prioritized actions to the goals and strategies. Keep in mind that a single strategy might have one or many associated actions.

There are a number of “reality checks” that can be performed at this stage to assess how reasonable the draft actions are and how well they will combine to meet goals.

- Do some simple checks to see that goal targets are realistically attainable through the activities identified. The matrix below illustrates one example of a way to estimate potential savings of a common type of strategy.

Potential Total Energy Savings from Buildings								
		Building Stock Penetration Rate						
		1%	5%	10%	25%	50%	75%	100%
Savings/Bldg	10%	0.1%	0.5%	1.0%	3%	5%	8%	10%
	15%	0.2%	0.8%	1.5%	4%	8%	11%	15%
	20%	0.2%	1.0%	2.0%	5%	10%	15%	20%
	25%	0.3%	1.3%	2.5%	6%	13%	19%	25%
	30%	0.3%	1.5%	3.0%	8%	15%	23%	30%

In this example, the City set a goal to achieve 5% energy savings across all municipal buildings by 2020. This matrix gives the total potential energy savings from buildings as a function of the total savings achievable per building (on the left) and the percentage of all municipal buildings that undergo work (across the top). The goal of 5% total saving could be achieved if 25% of the municipal square footage was improved by 20% savings by 2020. The appropriate question would then be – is this level of penetration and saving realistic and achievable in that timeframe?

- In addition to considering the realism of meeting each individual target, assess the total contribution the draft portfolio of actions will have toward achieving goals. This may be a difficult thing to do quantitatively across many different types of actions, but try to identify in general any major gaps or unnecessary steps.
 - Different actions will have different kinds of direct effects that will be measured by different metrics – for example, increasing the average efficiency of the City’s vehicle fleet is monitored in terms of average miles per gallon, while reducing vehicle miles traveled on City business would be monitored by tracking total miles traveled. If both of these activities are added to the plan to help meet a goal to reduce energy use in the City’s fleet by X%, the effects of taking these actions should be translated into terms that relate to the goal. Calculate a rough estimate of the gallons of fuel saved through undertaking each of these actions, and assess the % of total current fuel usage this saving would represent. Translating the results of achieving proposed actions may not always be such a straightforward calculation, but in such cases, estimate the impact on the goal as clearly as possible in order to aggregate the total results.
 - Review the analysis to be sure there are no obvious gaps or redundancies. General questions to ask after this analysis include: Are there any goals or strategies where there are no actions identified? Any with too many to accomplish?

Once any necessary tweaks have been made, the Leadership Team should obtain preliminary sign off from the Champion on the draft prioritized actions, keeping in mind that they may change somewhat depending upon conclusions from the finance strategy (Step 7) and implementation planning (Step 8). After the development of the financing strategy has also been concluded, a formal implementation blueprint will be developed, and at that point the Champion can provide final approval for the proposed actions.

In the interim, the Leadership Team should begin to think about timing of the actions.

- Draft a rough timeline for action implementation, including growth of savings or other metrics toward goals and strategies. As it becomes clear how aggregated growth toward goals progresses across the portfolio of actions, adjust draft timeline as needed.
- Consider whether a staged approach – a systematic method of gradually making improvements – would be an effective option. For example, a staged approach may start with the most cost-effective and/or feasible actions, followed by pilot projects, and then longer-term projects and those that require more funding or political/regulatory support.
- The final timeline will be laid out in the implementation blueprint (Step 8).

Tools

[Tool 6.1: Sample Scoring Form for Prioritizing Energy Actions \(Qualitative\)](#) (.docx)

[Tool 5.1: Goals, Strategies, and Actions Planning Worksheet \(revisited\)](#) (.docx)

Resources Recommended for More In-depth Guidance

General

- ICLEI Municipal Clean Energy Toolkit
www.icleiusa.org/action-center/tools/municipal-clean-energy-toolkit
- ACEEE Local Policy Portal
<http://aceee.org/sector/local-policy>
- The State and Local Energy Efficiency Action Networks' Commercial Buildings Working Group
www1.eere.energy.gov/seeaction/existing_commercial.html
- ICLEI Commercial Energy Policy Toolkit
www.icleiusa.org/climate_and_energy/energy-efficiency-resources-1/commercial-energy-policy-toolkit/commercial-energy-policy-toolkit; includes Commercial Energy Policy Fact sheets
www.icleiusa.org/climate_and_energy/energy-efficiency-resources-1/commercial-energy-policy-toolkit/commercial-energy-policy-fact-sheets
- EPA Local Government Climate and Energy Strategy Series
www.epa.gov/statelocalclimate/resources/strategy-guides.html
- EPA State and Local Guide to U.S. EPA Climate and Energy Program Resources
www.epa.gov/statelocalclimate/documents/pdf/slb_guide_to_program_resources.pdf
- EPA Identifying and Evaluating Policy and Program Options
www.epa.gov/statelocalclimate/local/activities/policy-options.html#three

Learn from your peers

- National League of Cities Sustainable Cities Institute
www.sustainablecitiesinstitute.org/view/page.home/home
- National Association of Counties (NACo) Green Government Initiative
www.naco.org/programs/csd/Pages/GreenGovernmentInitiative.aspx
- Urban Sustainability Directors Network
www.usdn.org/home.html?returnUrl=%2findex.html

Internal government activities

- EPA Leading by Example in Government Operations www.epa.gov/statelocalclimate/local/activities/gov-operations.html
- DOE Internal Behavior Change Programs and Increasing Energy Efficiency (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/internalbehaviorchangeprograms.pdf
- DOE Effective O&M Policy in Public Buildings (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/effective_o_and_m_policy_in_public_buildings_presentation.pdf
- DOE Best Practices for Establishing Revolving Municipal Funds for Energy Efficiency Projects (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/bestpracticesforestablishingmunicipalfundsforenergyefficiencyprojects.pdf
- DOE Energy Savings Performance Contracting Resource webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/espc.html

Influencing community actions

- Partnership for Sustainable Communities www.sustainablecommunities.gov/aboutUs.html
- DOE Building Energy Codes Program www.energycodes.gov/
- DOE Better Buildings Neighborhood Program www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/
- DOE Clean Cities Program www1.eere.energy.gov/cleancities/
- NREL Introduction to Using Community-wide Behavior Change Programs to Increase Energy Efficiency (Webinar) www.nrel.gov/applying_technologies/state_local_activities/webinar_20110728.html
- Institute for Sustainable Communities Promising Practices in Low-Carbon Transportation: A Resource Guide for Local Leaders www.iscvt.org/who_we_are/publications/Low_Carbon_Transportation_Resource_Guide.pdf

Step 6 – Appendix

Policies, Programs, and Projects to Consider

Ask whether the following commonly used components of energy plans will help meet the CESP goals. This list has been compiled to help planners identify results-oriented items to discuss and is not intended to be exhaustive. (For a more detailed discussion on developing the financing strategy to pay for these activities, see Step 7.)

Local government CESP – the following activities and projects are often included in local government energy plans.

- **Low-cost operational changes** – often driven by policy initiatives, these will require political resolve to implement and enforce. Examples:
 - Make a public commitment to energy savings.
 - Pass a Sustainability or Resource Conservation Resolution to codify this commitment.
 - Create a Clean Energy or Sustainability Advisory Board.
 - Appoint a Sustainability Coordinator.
 - Participate in broader national initiatives, such as the **DOE Better Buildings Challenges** and the American Public Works Association’s Sustainability Initiative (for public works professionals).
 - Establish energy programs and policies for government employees.
 - Provide employee training on energy use awareness and resource conservation.
 - Reward individual departments that incorporate energy efficiency provisions into their decisions by returning a portion of the savings to their departmental budgets.
 - Provide energy-related benefits, such as home audits or efficient equipment coupons, for public employees.
 - Use tracking sheets, scorecards, etc. to compare performance of similar facilities and foster a sense of competition.
 - Highlight and reward accomplishments of individuals, departments, and facilities.
 - Offer cash bonuses and other rewards if goals are met.
 - Use environmental or financial messages to promote a sense of environmental, social, and fiduciary responsibility.
 - Tie employee performance standards to energy goals.
 - Ask for energy- and cost-saving suggestions from staff and recognize those that work.
 - Reduce employee fuel use.
 - Institute a teleconferencing and telecommuting policy.
 - Provide employee benefits in support of mass transit use and/or bicycling.
 - Adopt energy efficiency procurement policies.
 - In buildings: Require ENERGY STAR[®] office equipment, use lifecycle costing.
 - For fleet: Establish fuel efficiency specifications in vehicle bids or move to alternative-fuel vehicles; downsize the fleet where possible; require contractors to use fuel-efficient vehicles.
 - Commit to partnering with your local utility or energy efficiency program administrator to maximize energy efficiency opportunities.
 - Evaluate current energy procurement agreements.

- Remove hidden barriers to energy efficiency and renewable energy—for example, limitations on contract length that restrict using power purchase agreements for renewable energy projects.
 - Set energy efficiency policies for government buildings.
 - Require energy benchmarking to improve energy management.
 - Establish a policy to rate and disclose the energy use of all public buildings.
 - Set periodic retro-commissioning policy.
 - Set standards for new public buildings—if LEED, prioritize energy efficiency.
 - Establish efficiency guidelines for leased buildings.
 - Codify an Energy Efficiency Master Plan for building upgrades—require all cost-effective investments in buildings be undertaken; prioritize these investments based on energy audits or energy tracking software.
- **Capital projects**
 - Undertake projects that are most-often found to be cost effective and/or high impact – for example:
 - Replace street and traffic lights, and parking garage fixtures.
 - Undertake cost-effective building retrofits identified in the baseline analysis (lighting and lighting controls, building envelop, HVAC systems).
 - Investigate high-efficiency pumps for water and wastewater treatment.
 - Undertake retro-commissioning to tune-up energy systems in buildings; follow up with ongoing operations and management procedures to ensure efficiency.
 - Put an Energy Management System in place.
 - Look for opportunities for cogeneration and combined heat and power projects.
 - Invest in fuel switching when feasible (electric or fuel oil to natural gas).
 - Investigate methane capture from landfills.
 - Undertake projects that provide long-term energy savings – for example:
 - Phase in the use of renewable energy on buildings.
 - Convert to solar power for outdoor lighting projects and traffic lights.
 - Create an internal revolving energy fund to finance capital projects over time
 - Seed money is invested in energy projects, and the revolving fund is recapitalized using either the actual savings of the projects, the estimated savings of the projects, or a balance transfer from the general fund of unspent energy dollars.
 - Benefit: highlights the economic return of energy investments – operational savings are returned to the fund and then reinvested in additional projects.
 - Example: Greening the Bottom Line: The Trend toward Green Revolving Funds on Campus www.greeningthebottomline.org/
 - Enter into Energy Savings Performance Contracts (ESPCs) with Energy Service Companies (ESCOs)
 - An Energy Service Company (ESCO) acts as a project developer and arranges financing for projects designed to improve the energy efficiency and maintenance costs for buildings. The ESCO assesses a facility’s energy efficiency opportunity, manages the improvement implementation, and guarantees the energy savings will be greater than the cost of the project. ESCOs assume the technical and performance risks associated with projects – including providing a financial guarantee of a certain level of energy savings – and are repaid through the dollar savings generated. Under performance

contracting, projects are designed and installed by a single ESCO that then guarantees a certain energy cost savings over time.

- Can be particularly effective for large projects and for large-scale collections of efficiency and/or renewable energy projects conducted at the same time.
- Can be limiting, as the ESCO will provide the financial benefit of a performance contract only for the brand and type of equipment they support.
- Enter into an Energy Service Agreements (ESAs) – much like performance contracting through an ESCO, an ESA separates the financial contract, by which savings associated with energy production or reduced energy consumption is used make periodic service payments to a financial institution, from the installment of the equipment, which is done through a separate equipment contract.

Community-wide CESP – while community members themselves must take on responsibility for the bulk of the necessary activity and investment for a community-wide CESP, the local government can have a very important role in influencing, energizing, and leveraging the goals and activities in the community. Consider including activities and projects in the following categories:

- **Local government policies that provide a framework for effective action toward energy saving by community members at low-cost to government.**
 - Lead by example – Many of the low-cost operational changes discussed above can be adopted by businesses and other entities in your community. Publically demonstrating those actions taken by the local government itself, and the benefits they lead to, can motivate community members.
 - Establish codes, policies, and platforms to support the CESP goals.
 - Establish stretch codes – enact more-stringent energy efficiency requirements on building codes where cost-effective, or ensure good enforcement of current codes to gain the savings they offer.
 - Establish time-of-sale energy use disclosure requirements.
 - Adopt renewable-energy-friendly ordinances and permitting requirements, including support for community-scale projects.
 - Enact energy-smart zoning – including walkable downtowns, village centers, limitations on fragmentation of open spaces and farmland.
 - Include unambiguous statements of the jurisdiction’s commitment to energy efficiency and new clean energy facilities in the CESP, so investment uncertainties and expenses are reduced in permitting and regulatory proceedings.
 - Adopt a Sustainable Transportation Plan for the jurisdiction, to include:
 - Complete Streets policy to ensure transportation planners and engineers consistently design and operate the entire roadway with all users in mind.
 - Bicycle and pedestrian planning.
 - Mass transit planning.
 - Parking requirements that enhance commuting and alternate transportation options.
- **Government actions to influence community participation in energy-saving activities (relatively low cost)** – these activities are designed to invigorate the community and build on enthusiasm and actions already underway. Examples:
 - Educate the broader community on energy efficiency, renewable energy, and transportation efficiency.
 - Provide public outreach and education to maximize information and access to available utility, regional, state, and federal programs.
 - Convene business and community peer groups to learn from each other.

- Convene industrial energy managers to discuss best practices.
 - Develop demonstration projects and case studies.
 - Work with the community to set community-wide energy goals and energy efficiency, renewable energy, and transportation efficiency targets.
 - Work with local training organizations to support contractor training to develop EE and RE markets.
 - Partner with the local Chamber of Commerce to provide a corporate sustainability workshop.
 - Support coalition building: Establish a Green Building Task Force or Community Energy Committee, or partner with a non-profit that will do so.
 - Recognize significant actions by community energy leaders.
 - Coordinate Green Buildings (or Green Business) Challenge programs – example: **DOE Better Building Challenge** www4.eere.energy.gov/challenge/home.
 - Give awards to encourage and publicize behavior that results in energy efficiency, renewable energy, and efficient transportation investments.
- **Government-supported, financed or funded projects and programs (higher, one-time or on-going costs)**
 - Jurisdictions can provide in-kind support to help develop local efficiency, renewable energy, and efficient transportation markets and support job development. They can also establish or help support the development of financing mechanisms and programs for these activities, or directly fund them. (For a more detailed discussion on developing the financing strategy to pay for these activities, see Step 7.)
 - Support residential or business building sustainable energy activities by providing energy assessments, workforce training, outreach and marketing for non-governmental programs, and technical assistance.
 - Establish EE or RE financing programs to provide loans to consumers – requires seed money for establishing a loan fund, but ongoing fund balances are maintained as long as there are no defaults. For example:
 - Revolving loan programs
 - Seed money is invested in energy projects, and the revolving fund is recapitalized using either the actual savings of the projects, the estimated savings of the projects, or a balance transfer from the general fund of unspent energy dollars.
 - This type of support is long-lived relative to the ongoing cost of a rebate program.
 - Loan-loss reserve funds to provide assurance for mainstream loan programs – public funds used to secure private lending for energy efficiency and renewable energy that might not otherwise occur, and with loan terms that are better than market rate
 - Seed money is invested but only drawn down in the case of loan default to primary lender, so fund should be long-lived.
 - Can provide critical initial support for market development – mainstream financial institutions realize the value of efficient energy activities and begin to provide products that reflect this value.
 - Interest rate buy-downs of loans made through mainstream loan programs – public funds used to create more favorable lending terms for borrowers
 - Loans are made by mainstream borrowers, and the government pays a percentage of the interest rate off at the time of the loan, giving borrowers a very low rate

- This approach requires a lot of money because funds spent to buy down interest rates do not revolve in any way
- Property Assessed Clean Energy (PACE) programs
 - Businesses and/or residents make EE and RE upgrades using capital provided by the local government and repaid through property assessments.
 - Obligation for repayment remains with the property that received the improvement – rather than with the borrower – even if property is sold.
 - Please note: due to federal scrutiny many, *residential* PACE programs have suspended operations. To date, *Commercial* PACE programs have not been directly affected.
 - To establish a PACE program, a community's state must have passed enabling legislation; to determine if PACE is an option for you visit: http://pacenow.org/wp-content/uploads/2012/08/PACE-Programs-and-Legislation-at-a-glance_August2012.pdf
- Provide incentive or rebate programs for residential or business building new construction or retrofit EE or RE activities.
- Provide funding for community-level efficient transportation initiatives – such as improved signal timing; re-engineering traffic congestion areas; intelligent transportation systems.

Additional CESP options for communities with municipal or cooperative utilities

- Provide utility support for energy efficiency and renewable energy activities through rate-payer supported programs – education, audits, technical support, rebates, and financing programs.
- Provide financing opportunities that take advantage of the utility structure – example: on-bill financing for energy efficiency and renewable energy projects.



STEP 7: PUT TOGETHER A FUNDING AND FINANCING STRATEGY

WHAT: The majority of actions recommended in a CESP will not be implemented unless someone chooses to fund them in some way. The cost to implement recommended actions will likely vary widely, from no-cost policy changes to capital-intensive infrastructure projects. Taking the time to identify opportunities to pay for these actions within the plan will increase the likelihood that they will actually be implemented. There are a variety of sources to fund projects, some of which take advantage of financing opportunities to provide capital in the near term, but ultimately need to be paid back by tax payers. While these financing opportunities are not “free money”, their ability to access needed funds at strategic times can be a particularly valuable option for energy projects with often attractive returns in the form of reduced energy costs. Financing options vary in terms of risk profile and time horizon, and there are ways to structure these transactions and projects in order to minimize risk and align savings with repayment schedules. Take the time to research options and get information from a wide range of sources, because there is no single, easy answer. Funding sources vary over time and among communities and states, so each jurisdiction will need to develop a strategy specific to their local conditions and needs.

WHY: Developing an overarching funding and financing strategy as part of the CESP allows for:

- Identification of appropriate financing for different activities,
- Staging of short- and long-term financing,
- Effective use of portfolios of financing, and
- Greater support and likelihood of CESP adoption.

WHO: The Leadership Team will work with local government financial officials on this task. Stakeholders with financial interests should also be involved, such as:

- Regional/state officials, utilities, or other energy efficiency finance program administrators; and
- Representatives from local financial institutions, including banks, credit unions, foundations, and bonding authorities.

HOW: To find appropriate financial support for the CESP, the Leadership Team will need to:

- Understand Financial Requirements for Different Types of Energy Actions
- Identify Potential Financing and Funding Sources
- Design a Suite of Mechanisms for Proposed CESP Actions

Engage these experts as part of a finance-focused stakeholder task force or with individual interviews. The Champion will also provide feedback during this step.

WHEN: Because designing a cohesive financing strategy is complicated and can take several months, it is important to begin financing research and interviews early in the CESP process. Initial conversations can inform the energy assessment (Step 4), so you may want to start your outreach then, and preliminary findings can help in the identification and prioritization of actions (Step 6). However, since there are advantages to building suites of financing solutions, be sure that the major framework of the CESP – vision, goals, strategies, and actions – is in place before getting too far into the design of the financing portfolio. The finance strategy will be finalized as a part of the implementation blueprint (Step 8).

CESP Timeline

Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5					Goals and Strategies					
Step 6						Identify Actions				
Step 7	Identify Financing									
Step 8								Implementation Blueprint		
Step 9								Monitoring Plan		
Step 10	Scope and Develop Final CESP								Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10

Understand Financial Requirements for Different Types of Energy Actions

There is a very wide range of options available for paying for energy actions, but no single financing source is suitable for every program and/or unit of government. Thus, it is important to **understand the available options** and match appropriate funding types to actions that have been prioritized for the CESP. The tables on the following pages provide a high-level overview of different broad categories of CESP actions and potentially appropriate financing and funding mechanisms. It is organized as follows:

- For a **local government CESP** – organized by discrete projects vs. ongoing activities
- For government support of a **community-wide CESP** – organized by level and duration of support needed: ongoing support for low-cost activities; ongoing support of higher cost activities; and substantial one-time funding used to fund discrete projects or programs.

More information on specific mechanisms listed here can be found in the **Step 7 – Appendix**, as well as the Resources identified at the end of this section. For those that are unfamiliar but might be of interest, the Leadership Team may want to do some initial research. Then, working with local government financial officials and relevant stakeholders, begin to complete preliminary groundwork to determine which of the above options might work best for your CESP. Key questions to answer include:

- Which avenues have already been used, and/or which mechanisms are currently in place for energy activities? For other activities?
- Will local government decision-makers see this endeavor as a core government function, i.e., is the government willing to dedicate a portion of current revenue for CESP activities? Or is the government willing to create new taxes or fees specifically to support CESP activities?
- Is debt financing an option? Considerations include whether or not the government has an appetite for taking on debt; the creditworthiness of the government; and any relevant debt limits the state might have for local governments. If debt financing is an option, what will the challenges be?

For this step, the Leadership Team may want to establish a finance-focused stakeholder task force, with government staff, including financial officials, and representatives from energy efficiency finance program administrators and local financial institutions. This task force can take the lead on the tasks below, reporting to the Leadership Team.

Type of Plan	Type of Activity	Potential Source of Financing	Potential Mechanisms
Sources for Local Government Projects and Activities	Capital Projects – may be defined through a Capital Improvement Plan	Annual Budget process - appropriated funds	Capital Improvement Fund
			Capital Reserve Fund
		Banks and other mainstream financial institutions	Internal Revolving Loan Fund (RLF) for Energy
			Short-term bridge financing or long-term borrowing Financing arranged by ESCOs for ESPCs
		Bonding	Tax-exempt bonds
			Qualified Energy Conservation Bonds (QECBs) Clean Renewable Energy Bonds (CREBs)
	Partnerships and third-party financial support	In-kind support	
		EE or RE program rebates, or financing from utility, state, federal sources	
		Grants	
	On-going Government activities: staffing, O&M, debt service, etc.	Third-party ownership models	Leasing
Power Purchase Agreements (PPAs)			
Annual Budget process - appropriated funds		General Fund, on-going budget and procurement processes	
New cash flow sources	Cost savings from previous EE or RE projects		
	Taxes, enterprise fees, special assessment districts		
	Income from RE projects - energy sales, renewable energy credits (RECs) Partnership support		
Behavioral changes	Policy directive – minimal \$\$ needed		

Type of Plan	Type of Activity	Potential Source of Financing	Potential Mechanisms
Additional Sources for Expansion to a Community-wide Plan	Ongoing support for low-cost activities: education, staffing, recognition programs.	Annual budget process - appropriated funds	General Fund, on-going budget and procurement processes
		Leverage public/private partnerships	Utility programs
	Economic development organizations (including Community Development Financial Institutions (CDFIs) Grants		
	Ongoing support for high-cost activities - example: EE/ RE rebate programs		On-going cash flow
		Program fees	
		Enterprise fees, special assessment districts; gross receipts tax	
		Proceeds from settlements, lawsuits, and purchase agreements	
	One-time funding to establish discrete programs: Property Assessed Clean Energy (PACE) programs, RLFs, demonstration projects, on-bill financing program (for municipal utility)	Lump sum project support or seed funding	Capital funding
			Grants
			Bonds - including QECBs
Program-related investments			



Having a good relationship with your state energy office and congressional representation can be very effective. State and congressional staff can keep the local government informed about funding opportunities.

Identify Potential Financing and Funding Sources

Once an initial set of priority actions have been proposed in Step 6, the Leadership Team, working with financial officials and stakeholders, can begin to identify potential financing mechanisms.

- Start by matching proposed actions to the appropriate mechanisms identified in the table above and discussed in more detail in the **Step 7 – Appendix**. Remember to take into account who will be performing the actions and their expected durations.
- Then develop a more-detailed inventory of financing options that match the proposed CESP actions. The **Inventory of Potential Financing Activities Template** provided at the end of this chapter sets out a list of useful information to collect. Be sure to inventory existing types of financial support, as well as new options. Using the knowledge gained from this preliminary groundwork, focus on those mechanisms that have the best potential. For example, if research has indicated that debt financing is not a likely possibility for your community, do not spend time gathering more details for bonding options. Alternatively, if you

know that ESPCs have been used by your community successfully in the past, be sure to include them in your inventory for further research.

Design a Suite of Financial Mechanisms for Proposed CESP Activities

Once a list of potential financing sources is in hand, the Leadership Team should review the inventory with the Champion and solicit feedback. Then the Team, again working with financial officials and stakeholders, can start to design a suite of mechanisms to support the proposed CESP from the options presented in the inventory.

Developing a **portfolio of different types of financing** support is key, because a single financing mechanism is unlikely to be the full answer for all actions, and a full portfolio of support also mitigates risks.

- Different projects will require different timeframes, risk models, and financing mechanisms. Match the financing type to these needs. For example, relying on a string of short-term financing sources for a long-term project or program is subject to the danger of program uncertainty if source of funding does not continue.
- Layering different financing sources into the portfolio provides redundancy and can mitigate impacts of economic slowdowns, lost grants, and other risks. For example, a combination of bonding and performance contracts can provide a relatively stable and low-cost platform for financing energy efficiency, while also providing larger savings in the event fuel prices rise.

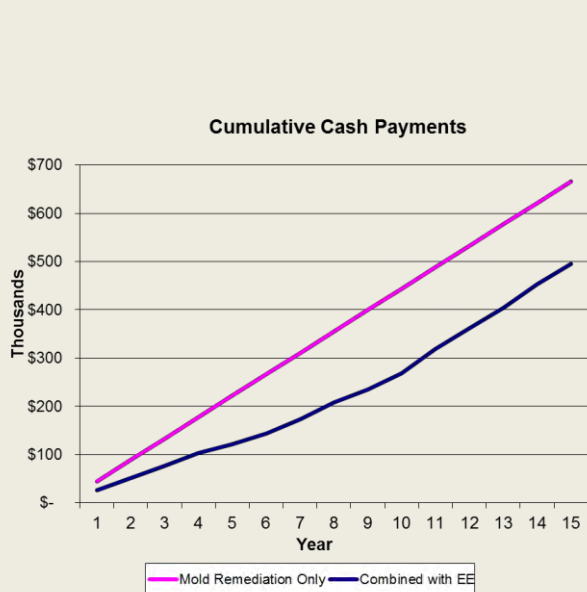
Bundling actions into portfolios for funding – that is, collecting several actions under a single financing approach – can have many advantages as well.

- The ability to aggregate the investment return from projects that produce larger returns with more marginal projects results in total portfolios that pass cost-effectiveness tests. This allows a **broader range of projects** to be funded in the plan. This can be true not only with energy measures within one project but also across multiple projects. For example, projects with short payback periods can be combined with projects with longer payback periods to make the average savings over time more constant. This method has helped many governments complete projects with longer payback periods, such as renewable energy projects.
- Aggregating projects from many departments or public agencies (schools, wastewater treatment plants, etc.) under a single financing structure, such as a bond initiative, can provide overall savings through **shared transaction costs and better credit ratings**.
- **Partnering with other local governments** can achieve similar advantages, which is especially valuable for small governments.
- In addition to the benefits of bundling energy projects, consider **combining energy upgrades with non-energy upgrades**, particularly those that are already planned and have buy-in. This can achieve savings again through reduced transaction costs, as well as help the energy effort **gain momentum and internal/public support**. To make the case for adding an energy project, articulate how adding an efficiency project can help reduce total net costs through cost savings. See **CESP in Action** below.

CESP IN ACTION:

COMBINING NON-ENERGY AND ENERGY-MEASURES FOR EFFECTIVE FINANCING

An elementary school planned to issue a bond to raise funds for a mold remediation project. The city's energy planners suggested they analyze the effects of adding energy efficient lighting that had not been previously considered to the mold remediation project. While the total amount borrowed is higher, combining the \$\$ saved on electric bills with the bond payments results in lower total cash outlay than the original project would have realized. In addition, bond issuance and transaction costs were lower than if a bond was issued separately for each project.



Mold Remediation Project

Total amount borrowed \$500,000
(Rate and term – 4%; 15 yrs.)

Total cost \$665,719

Energy Efficiency Project - Lighting

Total amount borrowed \$454,510
(Rate and term – 4%; 15 yrs.)

Total cost \$605,152

Total net energy-associated savings \$776,362
(15 yrs.)

Combined Project

Total amount borrowed \$954,510

Total costs – including financing \$1,270,871

Total project costs net of energy-associated savings \$494,509

As the Leadership Team is reviewing options for portfolios of mechanisms and actions, there are some additional **funding principles** to remember.

- **Timing of costs and savings matter** – as touched on in Step 6, stage actions rather than thinking about them on an individual basis, so that cost savings can be “recycled” to support further CESP activities. A popular approach, particularly in municipal operations, is to look for fast, easy ways to save energy, allocate a portion of the savings back to the agency or department that creates the savings as incentive to keep doing more, and then use the rest of the savings to reduce energy bill paid by taxpayers, and publicize it to create support for ongoing CESP activities.

However, it is critical to also remember that too much “cream-skimming” up-front – doing the fast, easy projects only – will make it difficult to take on projects with longer payback periods down the road. So strike a balance – consider doing just one or two limited low-hanging fruit projects to “prove the concept,” and then move on to comprehensive energy improvements with a balance of short- and long-term paybacks.

- **Leverage/encourage private investment** where appropriate, especially for community-wide programs. For example, structure loan programs to include credit enhancement (e.g., loan loss reserves, debt service reserve) and/or a form of security (e.g., a lien on property) to attract participation from local financial institutions.

Once the suite of mechanisms has been identified, outline at a high level the necessary actions and timeline to put the financing for the CESP in place, working closely with financial officials. The Leadership Team should include this strategy in the implementation blueprint described in Step 8. Information for each financial mechanism can be

included with the other information for each specific action/strategy and/or provided as a complementary but separate discussion, summarizing the portfolio of mechanisms and next steps. The Champion will provide final sign-off on the finance strategy as a part of the implementation blueprint. Remember, this is sign-off on the strategy for the purposes of inclusion in the plan only – official approval of a financial approach will likely need to come from a full elected board and renewed or revisited on an annual basis with each budget cycle.

Tools

[Tool 7.1: Inventory of Potential Financing Activities Template](#) (.docx)

Resources Recommended for More In-depth Guidance

General

- DOE Energy Efficiency and Renewable Energy Finance Guide and webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/financingoverview.html
- EPA Establishing Funding Sources and Financing Vehicles www.epa.gov/statelocalclimate/local/activities/funding-options.html
- EPA ENERGY STAR Financial Evaluation Calculators and Resources www.energystar.gov/index.cfm?c=assess_value.financial_tools

Funding & Financing Projects and Programs for Government Facilities

- DOE Qualified Energy Conservation Bond (QECB) webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/qecb.html
- DOE Best Practices for Establishing Revolving Municipal Funds for Energy Efficiency Projects (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/bestpracticesforestablishingmunicipalfundsforenergyefficiencyprojects.pdf
- DOE Energy Savings Performance Contracting Resource webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/esp.html
- DOE's Power Purchase Agreement webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/ppa.html

Funding & Financing Community Projects and Programs

- DOE Clean Energy Finance Guide for Residential & Commercial Building Improvements www4.eere.energy.gov/wip/solutioncenter/finance_guide/
- DOE On-Bill Repayment Programs webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/onbillrepayment.html
- DOE State and Revolving Loan Funds webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/revolvingloanfunds.html
- DOE Property Assessed Clean Energy (PACE) Programs webpage www1.eere.energy.gov/wip/solutioncenter/financialproducts/pace.html
- Engaging Financial Institution Partners (Webinar) www1.eere.energy.gov/wip/solutioncenter/webcasts/default.html
- Partnering with Utilities: Part 1: Successful Partnerships and Lessons from the Field (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/partneringwithutilitiespart1successfulpartnershipsandleasonsfromthefield.pdf; Part 2: Advanced Topics for Local Governments in Creating Successful Partnerships with Utilities to Deliver Energy Efficiency Programs (Webinar) www1.eere.energy.gov/wip/solutioncenter/pdfs/partneringwithutilitiespart2advancedtopicsforlocalgovernments.pdf
- Better Buildings Challenge Financial Allies www4.eere.energy.gov/challenge/allies/financial-allies

Step 7 – Appendix

Financing Mechanisms to Consider

The following short descriptions are provided to give an introductory understanding of these financing mechanisms and provide an indication of when they could be useful. The objective of this list is to briefly present the types of options currently available rather than to fully describe all the technical details that would be necessary to master in order to employ each option. More-detailed information on these opportunities is available at the sites listed in the Resources section.

Financing Options for Local Government CESPs – Discrete Government Projects

Most CESPs will be looking for ways to pay for projects to upgrade government buildings or facilities. Examples include one-time funding needed for new construction, equipment upgrades, fleet purchases, or other large projects. Finding reliable support will be most effective if these projects are identified as part of a Capital Improvement Plan, a short-range plan (typically about 4 years) that:

- Identifies proposed capital projects and equipment purchases,
- Provides a planning schedule, and
- Identifies options for financing the plan.



Add energy savings requirements to all capital improvement projects, or prioritize those projects that provide savings.

Potential financing options for these **discrete projects** include:

- **Capital reserve funds** – an account on a municipality's balance sheet reserved for long-term capital investment projects or any other large and anticipated expenses that will be incurred in the future.
- **Fund balance** – essentially the government's savings accounts, fund balance is built up over time when government income exceeds government expenditures. These funds may be unrestricted in their availability or may have restrictions. Governments are generally expected to maintain a certain level of fund balance as a percentage of their incomes.
 - More information on fund balance is available from the Government Finance Officers Association: www.gfoa.org/downloads/NewFundBal_GFR_apr_09.pdf
- **Cost savings from previous EE or RE projects** in Internal Revolving Energy Funds
 - The revolving fund is recapitalized using either the actual savings of the projects, the estimated savings of the projects, or a balance transfer from the general fund of unspent energy dollars
 - Having an internal revolving energy fund allows the government to fund a series of discrete EE or RE projects over time
- **Short-term financing or long-term borrowing**, including borrowing from:
 - **Main-stream financial institutions** – short-term bridge financing is the most common use from this source of financing.
 - Look for banks that describe offerings as “green” or call out energy efficiency or renewables in their marketing materials. Example: Wells Fargo Sustainable Energy Financing Division.
 - Working with the DOE Better Buildings Challenge Financial Allies – financial institutions that have pledged to develop innovative and cost-effective energy efficiency products and services – see the list at www4.eere.energy.gov/challenge/allies/financial-allies

- **Financing arranged by ESCOs** for Energy Savings Performance Contracts (ESPCs)
 - In most cases, when a government enters into an Energy Savings Performance Contract, it will secure its own financing. In some cases, though, the ESCO may help arrange financing or provide financing itself for the projects
- **Bonding**, including:
 - Tax-exempt government bonding, including general obligation bonds or revenue bonds.
 - Special debt obligations for energy efficiency and renewable energy projects, including **Qualified Energy Conservation Bonds (QECBs)**, a type of tax-credit bond where 70% of the interest earned by the investor is tax-free. This results in much lower interest rates for the bond issuer.
 - Qualified uses include: energy upgrades to public buildings, mass transit projects, and ‘green community programs,’ including street lighting upgrades and grant/loan programs for public/private retrofits.
 - Case Studies:
 - Using QECBs for Public Building Upgrades: Reducing Energy Bills in the City of Philadelphia: <http://financing.lbl.gov/reports/public-building-qecb.pdf>
 - Using Qualified Energy Conservation Bonds (QECBs) to Fund a Residential Energy Efficiency Loan Program: Case Study on Saint Louis County, MO: http://eetd.lbl.gov/ea/emp/reports/ee-policybrief_062011.pdf
 - Using QECBs for Street Lighting Upgrades: Lighting the Way to Lower Energy Bills in San Diego: <http://financing.lbl.gov/reports/street-lighting-qecb.pdf>
 - See additional examples in Energy Program Consortium’s Qualified Energy Conservation Bonds memo: www.energyprograms.org/wp-content/uploads/2012/09/QECB_Memo_9-5.pdf
- **Public/private partnerships and support** – leveraging private investment to stretch government dollars. Such support includes:
 - **In-kind support from partners** – a partner that does not have financial resources but can provide necessary services can help by freeing up government funds, which otherwise would have been spent on administrative requirements, for other purposes such as project financing. Examples:
 - Engineering/ technical assistance
 - Financing analysis
 - Legal support
 - Media support/ communication services
 - Training
 - Support for energy efficiency or renewable energy projects in the form of **rebates, incentives, or loans from utilities and state and federal programs.**
 - **Grants** – while not sustainable funding, these are great resources, if available.
 - Future support from federal grants to help fund energy efficiency and renewable energy projects at recent levels is uncertain, but investigation is worthwhile – check with DOE, EPA, U.S. Department of Housing and Urban Development, U.S. Economic Development Administration, U.S. Department of Agriculture, U.S. Department of Transportation, U.S. Small Business Administration, U.S. Department of Commerce, and others.

- Funds from state grants, statewide systems benefit charges, or proceeds from regional markets such as the Regional Greenhouse Gas Initiative (RGGI) are sometimes made available to local governments for use in public operations or community projects – check with the State Energy Office.
- Some private foundations grants provide support for energy efficiency and renewable energy projects and programs – these programs are usually looking for something innovative and/or replicable.
- Benefit: can be used as project capital or seed money for other programs.
- Challenge: hard to find; very competitive to win; often come with restrictions on how they can be spent.



The process of preparing a grant proposal can be valuable, even if a grant is not awarded. The existence of a work plan, with fully developed and documented project costs and expected energy savings, is a major step toward attaining other forms of support (leasing, bonding, etc.).

- **Third-party ownership models** – all allow the local government to implement energy projects without any upfront capital expenditure. A third-party provides the capital, owns the equipment, and passes on advantages from tax credit and depreciation benefits (not otherwise available directly to the government entity) in the form of reduced lease or contracted energy payments. Common forms include:
 - **Leasing** – leasing not only provides the advantages listed above – no up-front costs; favorable payment stream from pass-through of tax advantages – but also gives an added advantage over purchasing equipment in that lease payments become annual expenses rather than increases in debt load.
 - Raleigh, NC: solar installations on the city’s water treatment clearwells
www.raleighnc.gov/environment/content/AdminServSustain/Articles/WTPsolararray.html
 - **Power Purchase Agreements (PPAs)** – a contract in which one party sells energy to another at an agreed price for a fixed term. Typically much easier to use with renewable energy systems, where output can be metered, rather than energy efficiency, where the benefit is the energy not used.
 - Knoxville, TN: solar PV on convention center, PPA with TVA
www1.eere.energy.gov/wip/solutioncenter/financialproducts/ppa.html
 - **Performance contracting** – an Energy Service Company (ESCO) acts as a project developer and arranges financing for projects designed to improve the energy efficiency and maintenance costs for buildings. The ESCO assesses a facility’s energy efficiency opportunity, manages the improvement implementation, and guarantees the energy savings will be greater than the cost of the project. ESCOs assume the technical and performance risks associated with projects – including providing a financial guarantee to the lender – and are repaid through the dollar savings generated. Under performance contracting, projects are designed and installed by a single ESCO that then guarantees a certain energy cost savings over time.
 - Can be particularly effective for large projects and for large-scale collections of efficiency and/or renewable energy projects conducted at the same time.
 - Can be limiting, as the ESCO will provide the financial benefit of a performance contract only for the brand and type of equipment they support.
 - **Energy Service Agreements (ESAs)** – much like performance contracting through an ESCO, an ESA separates the financial contract, by which savings associated with energy production or reduced energy consumption is used make periodic service payments to a financial institution, from the installment of the equipment, which is done through a separate equipment contract.

Financing Options for Local Government CESP – Support for Ongoing Government Activities

Local government plans will also include ongoing activities within their operations designed to reduce energy usage. Examples of such activities include enhanced operation and maintenance processes, equipment commissioning, and new or expanded staffing to oversee these activities.

Potential financing options for these **ongoing activities** include:

- **Appropriated funds** through current budget and procurement processes.
- **New cash flow** for energy activities, which can come from:
 - Reduced expenses from **cost savings** from energy efficiency or renewable energy projects – lowering bills is equivalent to increasing income. To enhance the potential from using this approach:
 - Track savings from reductions in energy use and allocate them to future elements of the CESP.
 - Allow the department that achieved these savings to retain them in their department budget.
 - **Taxes, enterprise fees, and special assessment districts.**
 - Can come from taxes or fees on non-energy-related services, or from organizing energy services as enterprises for which fees are collected.
 - Could be collected from local utility customers on behalf of the local government.
 - For example, the City of Boulder instituted a Climate Action Plan tax. Boulder does not have a municipal utility but has arranged for Xcel Energy to collect a city tax from utility customers based on their usage, as a tax on carbon emissions. Proceeds fund city programs, including promoting energy audits for homes and businesses and installation of basic energy reduction measures, rebates and financing assistance for energy efficiency improvements and solar installations, and Eco Pass (bus pass) subsidies.
www.bouldercolorado.gov/index.php?option%3Dcom_content%26id%3D15356%26Itemid%3D2150
 - **Income from renewable energy projects** – including energy sales and revenue from Renewable Energy Credits or Green Tags.

Financing Options for Local Government CESP – Behavior Change Activities

Some actions that require behavioral changes come from policy implementation – these require political will more than new dollars.

Financing Options for Community-wide CESP – Financing Low-Cost Ongoing Support for Motivating Community-wide Energy Activities

Many CESP designed to address energy use in the broader community will often include relatively low-cost government activities designed to support community involvement, such as facilitating Lead by Example challenges and awards; conducting education and outreach efforts; convening peer groups; and leveraging third-party support.

Financing options for these types of activities include:

- Providing support directly through **appropriated funds** from the current budget and procurement processes.
- Undertaking work to leverage **public/private partnerships** and support, such as:

- Establishing **partnerships with utility or third-party administrators** of energy efficiency and renewable energy programs to showcase and support their activities.
- Doing the same with any other energy efficiency support available locally – see DSIRE (www.dsireusa.org) for a comprehensive listing of incentives and policies.
- Taking advantage of **in-kind support** from community partners who can provide resources to administer, staff, and develop information for these kinds of activities.
- Partnering with or supporting **economic development organizations** that fund energy activities that result in commercial investment and job development.
 - Includes Community Development Financial Institutions (CDFIs) - specialized financial institutions, certified by the Department of Treasury that must have a primary mission of promoting economic growth and stability in low- to moderate-income communities. www.bos.frb.org/commdev/necd/2006/q2/overview.pdf

Financing Options for Community-wide CESP – Financing High-Cost Ongoing Support for Leveraging and Motivating Community-wide Energy Activities

Some local governments will decide to make a more substantial investment in CESP activities to address energy use in the broader community, such as funding efficiency or renewable energy rebate programs. These actions require a stable, ongoing source of funding.

Financing options that produce a stable, ongoing stream of funding include:

- **System benefit charges** (or public benefits charge) – a small charge paid by every energy user as part of their utility bill in certain states.
 - Can be earmarked for a range of energy efficiency and renewable energy projects and programs – could fund transportation efficiency as well.
 - Usually collected by the utility – so available to jurisdictions with a municipal or cooperative utility if governing laws allow.
 - Local governments that receive power from an investor-owned utility that has a public benefits charge can work with the utility to tap into those funds (depending on how they are handled in a particular state) for local capital projects.
 - Some areas have regional or statewide programs funded through public benefits charges that pass on funds to local communities to support efficiency or renewable energy projects.
 - Example: Massachusetts Clean Energy Center: funds for public and community renewables, energy master planning, education/outreach, solar grants. www.masscec.com/
- **Program fees** – charged to participants in energy programs sponsored by the local government.
 - Examples: application fees for loan/rebate programs, contractor fees (fixed and/or per-project), homeowner fees, fees for “energy concierge” services, transportation project-related fees.
 - Program fees are usually not sufficient to cover the costs of full projects or programs but can add enough additional income to cover the costs of administering activities.
- **Enterprise fees, special assessment districts, gross receipts taxes** – particularly effective if programs or projects can be supported by the people they directly benefit.
 - Examples: Wastewater efficiency projects supported by water district fees; transportation efficiency projects supported by downtown business association.
- **Funds from settlements, lawsuits, and purchase agreements.** Many energy efficiency or renewable energy programs have found ongoing funding from proceeds from power plant lawsuit settlements or other agreements such as utility purchases or mergers. The state or regulatory body in those cases has authorized use of such funds to the local governments affected.

Financing Options for Community-wide CESP – Financing Discrete Projects to Leverage and Motivate Community-wide Energy Activities

An additional approach taken by some local governments to address energy use in the broader community includes actions that require a single infusion of funds or seed money, such as building individual large community or demonstration energy projects; or establishing revolving loan programs, loan-loss reserve funds, PACE programs, or on-bill financing programs to support consumer projects.

Financing options for these actions include:

- **Capital financing** for demonstration projects – supported by the same suite of sources as for discrete government projects (above).
- Establishment and recapitalization of **consumer loan and financing programs** – In the case of revolving loan funds, seed money is invested into the fund. Then loans are made to consumers by the government, a third party administrator, or a financial institution. The fund is recapitalized by loan principal and interest repayments as well as any interest earned on the fund balance. In the case of loan loss reserve funds, seed money is used to secure private lending, providing some payback to the financial institutions in case of default. Because the seed funding itself is not being loaned out, the fund is not recapitalized, though the loan loss reserve fund has the potential to earn interest income.
 - These types of support provide ongoing value, in that money is essentially reused over time.
 - Potential seed funding sources may include:
 - When available, grants are an effective way to initiate loan and financing programs – capital is returned as loans are paid back.
 - **Program-related investments (PRIs)** – investments made by foundations to support charitable activities that involve the potential return of capital within an established time frame. Might be an option when the program results match one or more of the foundation's exempt purposes.
 - Some innovative programs have used debt to seed loan programs for residents and businesses, to seed assessment programs for residents and businesses, or for internal revolving energy programs. Examples:
 - QECB-funded loan program: Saint Louis County, MO
http://eetd.lbl.gov/ea/emp/reports/ee-policybrief_062011.pdf
 - QECB-funded PACE program: Boulder County, CO
www.bouldercounty.org/sustainability/programs/pages/cslp.aspx



STEP 8: DEVELOP A BLUEPRINT FOR IMPLEMENTATION

WHAT: An implementation blueprint sets out detailed information to put the final CESP actions in place, including who will be responsible for each action, what the specific deliverables will be, and when they will be accomplished. It also incorporates conclusions from the finance strategy (Step 7) and the plan to do ongoing monitoring and evaluation (Step 9). The implementation blueprint will be integrated in the Final CESP Report and can also be used as a standalone document in the implementation phase.

WHY: Establishing a formal implementation blueprint is the key to realizing the vision, goals, and strategies, and turning the overall CESP into reality, as it:

- Articulates the resources, staff, and budget needed to sustain the CESP activities;
- Communicates expectations to local staff and to the community; and
- Provides a reference point for all parties to use in the implementation phase, to ensure that activities are moving in the right direction and achieving targets identified.

WHO: The Leadership Team will lead this activity, with facilitation by the Plan Manager, but implementation planning often requires additional data and support to be most effective. Input from stakeholders is important here so that responsibilities for plan actions are assigned to the appropriate departments and/or community groups and reasonable timelines are established. For a large CESP with many actions, have the Leadership Team appoint an Implementation Team and charge them with supporting the development of the plan and then implementing it. The Champion should sign off on the implementation blueprint, including the final prioritized actions, finance strategy (Step 7), and the plan to monitor and report on progress (Step 9).

HOW: To assure effective implementation of the CESP, the Leadership Team will need to:

- Develop a Blueprint
- Establish Operational Responsibilities
- Incorporate the CESP into Other Planning and Budgeting Efforts

WHEN: Once actions and funding sources have been identified, this step should take about 4-6 weeks for a more modest CESP, and 6-8 weeks for an extensive one. The most time-intensive part will be getting buy-in from relevant parties on implementation responsibilities, but stakeholder engagement throughout the earlier steps of the process can help ease this. The blueprint should be developed in parallel with the procedures for monitoring, evaluating, and reporting on progress (Step 9).

Develop a Blueprint

An implementation blueprint identifies the prioritized actions and lays out a specific outline for getting them accomplished. The Leadership Team will head its development, with the Plan Manager facilitating the process. Input from stakeholders is important here so that responsibilities for plan actions are assigned to the appropriate departments and/or community groups and reasonable timelines are established.

The implementation blueprint does not need to be a complicated document. It will be most useful as a guide going forward if it is easy to read and follow, rather than a wordy narrative, but it should contain enough information to guide those responsible for its component parts. Consider using a visual format, like the Goals, Strategies, and Actions Planning Worksheet matrix, modified to suit your CESP.

CESP Timeline

Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5					Goals and Strategies					
Step 6					Identify Actions					
Step 7					Identify Financing					
Step 8									Implementation Blueprint	
Step 9									Monitoring Plan	
Step 10					Scope and Develop Final CESP					Adopt & Publicize
Month:	1	2	3	4	5	6	7	8	9	10

Components of an effective implementation blueprint include:

- **Specific actions, tied to strategies and goals:** Update the **Goals, Strategies, and Actions Worksheet**, developed in Steps 5 and 6, with your final prioritized actions, including finance-related components. Be sure that action items are clear and specific, using directive, action-oriented language.
- **Deliverables and milestones:** Articulate specific deliverables for actions so that it is clear what success will look like, and, as appropriate, set interim milestones, such as first-year targets, to keep actions moving.



Break each strategy and action down into the smallest individual activities possible. If desired, add a “milestones” field to the Worksheet to identify specific steps necessary to complete an action. Articulating activities at this level will make them easier to assign, track, and accomplish.

- **Timeline** with simple and realistic schedules.
 - If a rough timeline was developed under Step 6 to see how actions will aggregate to achieve strategies and goals over time, start there. Develop it further, indicating the sequence of all actions and their expected duration.
 - As touched on briefly in Step 6, a staged approach for activities is often effective. Focus on what is fastest, easiest, less-expensive, and most-agreed-on – then build up to the harder and more-complex activities. Do a great job on these, and then use the publicity about the success and energy saved to motivate support for the harder things. This can also help with funding – consider using a portion of the savings from a first round of activities to invest in the next round of savings, with the balance going back into city coffers and providing taxpayer savings.
- **Data-capturing needs and reporting requirements:** Articulate metrics that should be tracked and outline how and to whom they will be reported. This information can be included with action discussion or included as a complementary discussion. For example, consider including the metric that will be tracked in the actions plan (see Goals, Strategies, and Actions Planning Worksheet), with details about how these metrics will be tracked and reported in a complementary section (addressed further in Step 9, including Monitoring Plan Template).
- **Responsible party(ies):** Leads (individuals or organizations) should be identified for each action. This critical aspect of the plan is discussed in more detail below. Implementation partners can also be identified.

- **Preliminary financing/funding plans:** The conclusions from Step 7 can be mapped to each specific action/strategy or may be included as a complementary discussion summarizing the portfolio of mechanisms and next steps.
- **Incentives to motivate actions:** Once the final CESP has been adopted, keeping the actions moving forward after the enthusiasm of the planning process is over can be a challenge. Identify incentives now that will support implementation and incorporate these into the blueprint. For example:
 - Use challenges between departments, businesses, or community sectors to drive participation and motivate action.
 - Provide awards for successfully achieving action milestones.
 - Allow departments that save energy to use associated cost savings to fund their next CESP project.
- Additional **optional** components:
 - How the CESP will be incorporated into other planning and budgeting efforts.
 - Preliminary marketing and engagement strategy (discussed further in Step 10).
 - Assessment of economic development potential and strategy.

CESP IN ACTION: SUSTAINABLE CORVALLIS ACTION PLAN

The City of Corvallis developed a useful worksheet approach to addressing the specific steps needed to implement their Energy Plan— see the Energy Action Plan starting on page 18 of their report): <http://sustainablecorvallis.org/action-plan/download-the-action-plan/>

Considerations for a **local government CESP:**

- Timelines are often fairly predictable – integrate actions and their milestones into planning and budget cycles.

Considerations for a **community-wide CESP:**

- Stakeholder engagement is key in the development of the implementation blueprint, as stakeholders will have information on actions and milestones, and input regarding resources available to carry out the actions.
- Timelines for a community-wide CESP are often longer than plans for government operations only, especially if the community-wide plan has a broad scope with regard to sectors.

After the Leadership Team has drafted the implementation blueprint and received input from stakeholders (including the Implementation Team, if applicable – see below), the Champion should review and sign off on it, including the prioritized actions, finance strategy (Step 7), and plan to monitor and report on progress (Step 9). The approved implementation blueprint will be incorporated in the Final CESP and should then be used as a standalone document in the implementation phase.



“Where most organizations fail, for all intents and purposes, is that they stop activities when the final draft is approved, rather than actually implementing and making it an ongoing part of City Sustainability efforts” – Scott Alisoglu, Sustainability Coordinator, Topeka, Kansas.

Establish Operational Responsibilities

Perhaps the most important part of the implementation blueprint is assignment of operational responsibilities to specific individuals/organizations for each action item. This puts individual tasks in the hands of the most-capable and appropriate person or organization, spreads the work load across resources, and creates a sense of ownership

and shared responsibility. It also ensures that resources are actually available – actions may need modification at this stage, depending upon the human resources available.

Be sure to choose appropriate leads for each action step – those staff members or community leaders with the ability and authority to make the work happen. There are a few general guidelines for selecting effective action leads that are often helpful.

- Assignments are frequently based on current activities, so look at who is doing similar work first. For a community-wide plan, match actions with volunteers/organizations whose mission will be furthered by the effort.
- After establishing initial ideas, ask for help in further identifying and/or narrowing down appropriate action step leads.
 - Assignments will depend on type of activity, so good sources for recommendations will be those individuals/organizations that helped scope out these parts of the plan, including stakeholders.
 - It is helpful if the parties making recommendations also have authority and resources to make assignments happen. For a local government plan, look to elected officials and department heads.
- Make sure that proposed leads have the appropriate authority to undertake actions.
- Engage people who have enthusiasm for the task, as it will increase likelihood of success.
- While for many elements of a community-wide plan, community members are the ones who will do the actual work, be sure to assign an appropriate government staff person to coordinate and/or monitor the action, to be sure that it is accomplished and synchronizes with other elements of the plan. This may be the Plan Manager or other lead for the Implementation Team, if established (see below).

For a large CESP with many actions, the Leadership Team may want to **establish an Implementation Team**, made up of the action lead individuals/organizations. The group can be managed by the Plan Manager or other local staff and charged with supporting the development of the blueprint and then implementing it. This gives action leads an opportunity to weigh in on the proposed implementation blueprint, including reasonable deliverables, timelines, and data needs. It will also provide the implementation step more coherence, visibility, recognition, and influence.

Incorporate the CESP into Other Planning and Budgeting Efforts

At this stage, the Leadership Team and Implementation Team (if established) should work with the Champion to discuss how to integrate the CESP into other planning efforts at the local government and community level. Parties should consider how the CESP will interact with the jurisdiction's master plan, land use plans, greenhouse gas reduction plans, economic development plans, and/or regional planning efforts. The CESP's progress will be more effective if coordinated with such efforts, and plan benefits will be more likely to be fully realized.

Be sure to also determine how to include plan activities as part of the annual budget development process. This will help assure timely financial support for CESP elements. The budget review process is also a useful annual opportunity to review progress and update plans (see Step 9) and to keep CESP activities visible.

Finally, discuss how the CESP will be included in the impact review for new government actions. This will help guarantee that impact on CESP activities and targets is taken into account in the development of any new local government policies or procedures, particularly those that effect sustainability and/or energy issues.

Consider including a summary of this approach in the blueprint and Final CESP, and make sure it is highlighted at the adoption phase for government officials.

Tools

[Tool 5.1: Goals, Strategies, and Actions Planning Worksheet \(revisited\)](#) (.docx)



STEP 9: PLAN TO EVALUATE

WHAT: While it may seem early to think about evaluating the outcomes of CESP actions, setting out a clear process for periodic assessment and evaluation up front means that responsibility for these important steps is clear and intentional. In concert with developing an implementation blueprint, identify the process and resources now for monitoring and evaluating progress, as well as providing that information to the public and making necessary adjustments.

WHY: Monitoring and evaluation is vital to the ultimate success of the CESP, as it allows:

- Informed management of activities,
- Adjustment of strategies to correct for or make up for deviations or shortfalls,
- Validation of progress toward goals,
- Progress reports to public and authorities to sustain interest; and
- Celebration of successes.

WHO: Identify someone to develop and oversee the activities involved in monitoring, evaluating, and reporting on the CESP progress. While the responsibility for carrying out tracking of individual actions will be held by the lead for each item, the Plan Manager is a good candidate for the ongoing responsibility of aggregating and synthesizing this information for the whole plan. Be sure to allocate the necessary funding and time resources to the ongoing tracking, evaluation, and reporting functions. This activity should be authorized by the Champion, as a part of the approval of the implementation blueprint (Step 8).

HOW: To maximize the chance of success for the plan, the Leadership Team will need to:

- Establish a Plan for Performance Measurement and Reporting
- Evaluate and Report on the Effectiveness of the Full CESP and Its Components on a Regular Basis
- Update the CESP When Necessary to Ensure the Best Results

CESP Timeline										
Step 1	Form Leadership Team									
Step 2	Identify Stakeholders	Engage Stakeholders								
Step 3	Vision									
Step 4	Energy Profile									
Step 5	Goals and Strategies									
Step 6	Identify Actions									
Step 7	Identify Financing									
Step 8								Implementation Blueprint		
Step 9								Monitoring Plan		
Step 10	Scope and Develop Final CESP								Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10

WHEN: The procedures for monitoring, evaluation, reporting, and update should be an integral part of the implementation blueprint and should be developed in parallel with Step 8. As with the blueprint, this effort may take between 4-8 weeks, depending upon the complexity and breadth of the CESP. Once implemented, the information gathered through these periodic assessments should become a regular component of CESP reporting and public outreach activities (Step 10).

Establish a Plan for Performance Measurement and Reporting

A specific plan for monitoring and progress reporting should be developed for each action in the plan. The Plan Manager and the leads for each action item should be involved in this process, and they will likely want to build partnerships with key data holders at this time (for example, staff in different divisions).

If not done as part of the earlier steps, this is the time to establish or clarify the following necessary **components of a monitoring plan** for each action item:

- **Measurable indicator (metric)** – for example: energy saved, renewable energy projects installed, greenhouse gas emissions reduced, funds leveraged, or jobs created.
 - Types of metrics include:
 - System-level metrics: measure the overall impact of a combination of activities (e.g., total government vehicle fleet fuel usage; total residential energy use).
 - Program-level metrics: measure the impact of a specific activity/program (e.g., number of bike parking stations; city hall energy retrofit savings by building).
 - Milestones/status update: illustrates whether or not a specific action has been taken or achieved (yes/no).
 - The most-useful indicators:
 - Are accessible, reliable, and well-documented.
 - Rely on existing data that are already available when possible – for example: energy use in buildings; number of customers enrolled in EE programs.
 - (For new data) Are relatively low cost and easy to measure, if possible – for example, simple surveys.
 - Provide results that are easy to communicate to others – they are easily understood by and relevant to the key audience.
 - Drive changes in behavior and energy use patterns.
 - Capture a range of factors, such as awareness, actions, and actual energy output.
 - Are scale independent – use % or normalized information when possible, to allow for relevance across time or relationships between two variables.
- **Baseline** – the starting point for each indicator.
- **Method for measuring progress** – for example: survey; data from government budget; data from external organization (number of new ENERGY STAR homes built from homebuilders association).
- **Process to use for collecting data**, including:
 - Who will collect the information – this will often be the lead for that action identified in Step 8, or they may delegate or partner with someone for monitoring.
 - How they will obtain it.
 - Where and how it will be tracked (see tracking system discussion below).
 - How the data will be analyzed.
- **How often data collected will be used to measure progress**, with a clear deadline to attain the goal – plan for regular assessments, so that adjustments can be made if necessary.

- **Reporting protocol**, including: milestone and reporting dates, what should be reported, and to whom it should be reported.

Determining the results of CESP activities can be difficult because not everything that a local government may want to measure is easily documented, so design for an **appropriate level of detail and rigor**. For example, the level of sophistication of this feedback process should be as rigorous as needed to meet any reporting requirements to funders or decision makers – otherwise, keep cost considerations in mind as a process is developed.

- Evaluation for a **local government CESP** is efficient when integrated into routine annual processes (budgeting, etc.), and communication to the public about progress is important to reflect good stewardship.
- **A community-wide CESP** only requires higher-level feedback to the broader citizenry but should report on the full range of activities – use quantitative values when possible and augment with qualitative outcomes when appropriate.
 - Because of the breadth of activities in a community-wide plan, there will be a lot of information from many sources to gather and track. This will be done most effectively if such data-gathering is coordinated by a single person – the Plan Manager is a likely candidate for this role.
 - Be sure to clearly specify the information needed from those who will be reporting on individual community activities. The collection, integration, and reporting of information from all these activities will be more efficient if the information tracked is the same across activities (as appropriate).
- Evaluating sophisticated efficiency or renewable *program* performance can be an extensive undertaking. Links to more-detailed resources providing guidance on designing such evaluations are found in the Resources section below.

Identify and/or develop **tracking systems** as needed, being sure that the individuals assigned as action leads are involved in their design. IT staff are also a good resource for this step.

- Define the level of detail needed and incorporate the characteristics of good systems.
 - A good tracking system will help identify when a specific activity is performing well, and when it is not meeting its expected performance and is in need of review.
 - Such a system should be centralized and available for all to use in gauging progress toward established targets, milestones, and deadlines.
- If possible, **build on existing tools** rather than developing new ones.
 - Developing a full-scale, internal tracking system to capture frequent and detailed information on every activity will be expensive and more sophisticated than needed for many types of goals.
 - Data from existing sources or simple assessments is often sufficient.
- If the CESP actions include installing equipment, benchmarking buildings, or developing energy-related programs, **using a detailed energy tracking system** at the project, building, or program level will be in order.
 - Benchmarking tools, such as EPA’s Portfolio Manager, that have been used for building energy use assessments in Step 4 will provide effective tools for ongoing performance tracking.
 - Other calculation tools for savings in buildings are available here: www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/resource_directory.html
- Note: **a tracking system for data is only effective if the information it contains is current and comprehensive**. Data need to be collected and incorporated into the system at an interval of time effective for the activity. Many organizations perform monthly updates to their tracking systems for data-intensive reviews – annual assessment is appropriate for items with longer-term horizons.

The Plan Manager or other designated lead will organize all of this information into a plan for monitoring and evaluation, which captures overall approach as well as specific decisions for each action item. See the **Monitoring Plan Template** at the end of this chapter for an example of the information that is useful to capture on an action-by-action basis. You can scale how much or little of this information you want to include in the implementation blueprint. For example, include the metric that will be tracked for each action in the overall implementation blueprint (see **Goals, Strategies, and Actions Planning Worksheet**), with the details about how these metrics will be tracked and reported in an appendix.

CESP IN ACTION: WATERBURY LOCAL ENERGY ACTION PARTNERSHIP: HOW THEY ARE MEASURING PROGRESS				
	Transportation	Heating Fuel	Electricity	Renewable Energy
Homes	Residential Fuel Efficiency and Practices <ul style="list-style-type: none"> • Average residential fuel efficiency population (Department of Motor Vehicles data) 	Heating Efficiency of Residences <ul style="list-style-type: none"> • % of households aware of fossil fuel heating index (school survey) • Average BTU/sq. ft. (fuel supplier survey) 	Electrical Efficiency of Residences <ul style="list-style-type: none"> • % of households aware of electric use index (school survey) • % of low-energy lighting in households (school survey) • Total kW/population (utility data) 	Residential Renewable Energy Production <ul style="list-style-type: none"> • % of homes w/ renewable energy (Vermont Energy Atlas) • Total kW produced per population (VT Energy Atlas) • % students exposed to education about renewables
Businesses	Business Fuel Efficiency and Policies <ul style="list-style-type: none"> • Average fuel efficiency of business vehicles (business survey) • % of employees with low-impact transportation (business survey) 	Heating Efficiency of Businesses <ul style="list-style-type: none"> • % businesses who have conducted heating audits (business survey) • Avg. heating BTU/ft² of businesses (business survey) 	Electrical Efficiency of Businesses <ul style="list-style-type: none"> • % of businesses aware of energy use (business survey) • % of businesses having energy audit (business survey) • % low-energy lighting used (business survey) 	Business Energy Production <ul style="list-style-type: none"> • Total kW produced by renewables on business infrastructure (VT Energy Atlas)
Public Buildings	Public Fuel Efficiency and Policies <ul style="list-style-type: none"> • % school bus ridership (direct survey) • % pop. served by public transport option (Department of Transportation) • Avg. fuel efficiency of public vehicles (direct survey) 	Heating Efficiency of Public Buildings <ul style="list-style-type: none"> • % of public buildings with heating audits (direct survey) • Avg. heating BTU/ft² of public buildings (direct survey) 	Electrical Efficiency of Public Buildings <ul style="list-style-type: none"> • Total kW use/ft² of public buildings (direct survey) • % public buildings with electric energy audit (direct survey) 	Public Energy Production <ul style="list-style-type: none"> • Total kW produced on public infrastructure (schools, tow offices, dams, etc.) (VT Energy Atlas)

Evaluate and Report on the Effectiveness of the Full CESP and Its Components on a Regular Basis

Assessing progress toward all the goals together provides insight into how the CESP is faring, so develop a plan for aggregating and evaluating performance information for the full CESP (all component parts) as well. Doing this overall evaluation has a number of advantages; it:

- Brings to light the dollars saved and other success stories as a means of building support for initiatives moving forward.
- Creates insight for new actions.
- Avoids repeating failures by identifying activities that are not as effective as expected.
- Assesses the usefulness of the tracking system and other administrative tools and processes, to better manage the plan.
- Provides staff and the public the opportunity to contribute to and understand the process.

As part of the planning for monitoring and evaluation, define and assign responsibility for developing periodic overall CESP reports. This should be a centralized activity, undertaken by the Project Manager or other manager of the implementation phase of the CESP (see Implementation Team discussion in Step 8). Planning for aggregated reports should include:

- Who the audience(s) is.
 - One objective of this periodic review is to assess how the plan is progressing overall to build support and adjust and adapt as necessary, so one key audience should be decision-makers.
 - Another objective is to obtain feedback and build support from the public, so this is another key audience.
- What the report(s) will look like – Use appropriate and relevant means of connecting with each audience. Detailed reports will be helpful for decision-makers, while summary reports are more effective for reporting to a broader audience (see more information on this in Step 10).
- What information should be included – Reports should include:
 - Reviews of progress toward meeting milestones, actions, strategies, and goals.
 - Review of the process – for example: Are the operational components of the plan continuing to work well? Were the right people assigned responsibility for each component? Are there adjustments that need to be made in the way the plan is monitored?
- Frequency of reports, depending upon the audience.
 - Reviews of progress toward meeting milestones and actions will be most effective if carried out at least quarterly by the overall Implementation Manager and/or Project Manager. This does not necessarily need to be shared as a report but could be, for example through online reporting.
 - Tying the more-detailed review to regular, institutionalized processes, such as the city budgeting process, can be efficient.
 - Summary reports can be less frequent – for example: an annual report card. Tying public progress reports to existing events also provides motivation for getting the work done on a timely basis.

CESP IN ACTION:

ILLUSTRATING PROGRESS TOWARD GOALS

Here are some good examples of ways to communicate the progress made toward CESP goals:

- Baltimore provides information on their Sustainability Plan's goals and progress toward achieving them, in periodic reports available on their website: www.baltimoresustainability.org/metrics/2010/Resource-Conservation-Goal-1.pdf
- The website for the Omaha Energy Plan provides information on the metrics they are tracking and reports of progress: www.omahaenergyplan.org/index.php/measuring-success-menu
- Pittsburgh Climate Action Plan, Version 2 is a progress report issued 5 years after the initial plan: <http://pittsburghclimate.org/wp-content/uploads/2011/12/Pittsburgh-Climate-Action-Plan-Version-2-FINAL-Web.pdf>

Update the CESP When Necessary to Ensure the Best Results

As a CESP is implemented and evaluated, it may become necessary to make adjustments. This should be done by the implementation lead and Leadership Team (or other decision-makers), in coordination with the Implementation Team and other stakeholders who can provide information on the particular area that needs adjustment.

If changes to the plan are needed because targets are not being effectively met:

- Start by identifying the contributing factors, both controllable (e.g., mismatched resources) and uncontrollable (e.g., weather abnormalities).
- Assess whether there should be changes to the implementation strategy. For example, milestones may need to be adjusted or leadership for plan components changed.
- Then take into consideration the actions and strategies. Resist the temptation to back off of the goals themselves.

If changes are needed because targets have been exceeded or new resources are available:

- Again, start at the lowest level. Add actions that ranked slightly lower than those that made the final cut in the original CESP, or accelerate timelines.
- Then consider expanding or ramping up existing strategies or goals, or even expanding the scope of the plan.

Note: if changes are made to the plan elements (i.e., goals, strategies, or actions), be sure to also adjust implementation components, including timeline, staffing, monitoring and evaluation, and financing as well.

Tools

[Tool 9.1: Monitoring Plan Template](#) (.docx)

[Tool 5.1: Goals, Strategies, and Actions Planning Worksheet \(revisited\)](#) (.docx)

Resources Recommended for More In-depth Guidance

Overall Plan Monitoring and Evaluation

- EPA Climate Action Plan Evaluation (*see 12/7/11 webinar*)
www.epa.gov/statelocalclimate/web-podcasts/local-webcasts-by-date.html#a120711
- EPA EM&V Webinar Series
www.emvwebinar.org/
- DOE/EPA Model Energy Efficiency Program Impact Evaluation Guide
www.epa.gov/cleanenergy/documents/suca/evaluation_guide.pdf

M&V for Buildings

- DOE Developing an EM&V Plan for Municipal Building Energy Efficiency Projects (Webinar)
www1.eere.energy.gov/wip/solutioncenter/pdfs/developing_an_evaluation_measurement_and_verification_plan_for_your_energy_efficiency_project-program.pdf
- DOE Portfolio Manager: Communicating Success: Measuring Improvements, Sharing Results (Webinar)
www1.eere.energy.gov/wip/solutioncenter/pdfs/communicatingsuccessmeasuringimprovementssharingresults.pdf

M&V for Programs

- DOE State and Local Energy Efficiency Action Network (SEE Action) Energy Efficiency Program Impact Evaluation Guide
www1.eere.energy.gov/seeaction/index.html
- DOE/ NREL Uniform Methods Project
www.nrel.gov/extranet/ump/

Examples of Municipal Plan Evaluation Metrics

- Report: Key Metrics for Implementing Arlington County's Community Energy Plan
<http://freshaireva.us/wp-content/uploads/2012/01/Metrics-Report.pdf>
- Omaha Energy Plan
www.omahaenergyplan.org/index.php/measuring-success-menu
- 2010 Annual Report: Baltimore City Office of Sustainability, Energy Use metrics
www.baltimoresustainability.org/metrics/2010/Resource-Conservation-Goal-1.pdf
- City of Boulder – Office of Environmental Affairs – Climate Action Program Assessment
www.bouldercolorado.gov/files/LEAD/climate%20and%20energy/City_of_Boulder_ALL_SECTIONS_FINAL_072809_v9.pdf



STEP 10: DEVELOP, ADOPT, AND PUBLICIZE THE CESP

WHAT: The last phase of the planning process is to prepare a Final CESP, present it for formal adoption, and then publicize it to the broader community. The final plan is a roadmap for the local government/community’s energy future, laying out where things stand today, the long-term vision, and the goals, strategies, and actions for achieving that vision. It also incorporates the implementation blueprint, including responsible parties, timelines, financing strategy, and process for tracking progress.

WHY: The Final CESP captures the results of the process in one comprehensive document, to effectively communicate to decision-makers and the public the outcomes of the planning phase and the importance of providing support to see the implementation of the plan through. Once completed, it is critical for the CESP to be formally adopted, so that there is an official commitment to its implementation and it has the weight of authority in future budgeting and other planning efforts. After adoption and throughout implementation, the CESP should be celebrated publically to engage and build support in the community.

WHO: Development of the Final CESP will be managed by the Plan Manager or other designee, under guidance from the Leadership Team. The Team, led by the Champion, will then present the plan to the City Council, County Commissioners, or other appropriate government body, and recommend adoption. Once adopted, the Leadership Team and Plan Manager, in coordination with the government’s public relations specialists, will lead the efforts to publicize the CESP and perform ongoing public outreach.

HOW: To finalize and successfully launch the CESP, the Leadership Team will need to:

- Prepare a Final CESP
- Have the CESP Officially Adopted
- Publicize the Adoption and Kick Off of the CESP
- Plan to Use Effective Communication and Public Relations Strategies to Keep the CESP Visible

CESP Timeline											
Step 1	Form Leadership Team										
Step 2	Identify Stakeholders	Engage Stakeholders									
Step 3	Vision										
Step 4	Energy Profile										
Step 5					Goals and Strategies						
Step 6					Identify Actions						
Step 7					Identify Financing						
Step 8									Implementation Blueprint		
Step 9									Monitoring Plan		
Step 10						Scope and Develop Final CESP				Adopt & Publicize	
Month:	1	2	3	4	5	6	7	8	9	10	

WHEN: Compiling the Final CESP can take several months, but to avoid a lengthy time lag between completing the planning and assembling the results, the Leadership Team should discuss how and in what form the plan will be developed early on (e.g., in parallel with Step 5 or 6). Then build a content outline and skeleton of the plan as you are completing the later steps, so that materials can be inserted as they are completed. Once the plan has been finalized, the Champion and Leadership Team will want to work for swift adoption and kick off of the CESP, to keep momentum going through to implementation. The related public engagement strategy can be developed as the later planning steps are being wrapped up and as the Final CESP is coming together.

Prepare a Final CESP

The format and contents of Final CESPs range widely – from simple public documents that lay out how the planning process occurred and the activities to be undertaken, to more-sophisticated, glossy plans that also seek to motivate a broad constituency to participate. About midway through the planning process, the Leadership Team, coordinated by the Plan Manager, should discuss what the CESP will look like and generally what it will include. Consult plans developed by other communities to stimulate discussion and ideas (for examples, see CESP in Action below and the full list of Strategic Energy Plans Cited in This Guide in the Introduction). Choices about the CESP’s approach and complexity depend on several factors, including:

- Audience for the plan,
- Scope of the plan,
- Level of detail and range of issues considered by the process,
- Overall complexity of the activities to be communicated, and
- Ways in which the plan can be used to motivate action.

Two plans are often prepared – a summary-level version for public consumption and a detailed version that includes the full implementation blueprint, to be used namely by those implementing the CESP.

- The Final CESP for **broad distribution** should include:
 - A title designed to stimulate interest.
 - CESP Vision.
 - Summary of the process used to develop the CESP.

CESP IN ACTION: PUTTING IT ALL TOGETHER: SAMPLE FINAL PLANS

Here are examples of high-quality final plans, from more simple to sophisticated:

- Pinehurst (NC) Strategic Energy Plan: www.vopnc.org/Portals/0/SiteContent/BoardDocs/Resolution%2009-26%20Adopt%20Strategic%20Energy%20Plan,%2010-13-09.pdf
- New Shoreham (RI) Energy Plan: www.new-shoreham.com/docs/Energy%20Plan1.pdf
- Topeka (KS) Energy Efficiency and Conservation Strategy: <http://www.topeka.org/pdfs/CityofTopekaEECS.pdf>
- Bad River Band of Lake Superior Tribe of Chippewa Indians: www.badriver-nsn.gov/images/stories/docs/bad%20river%20tribal%20energy%20plan%202012%20draft.pdf
- Frederick County (MD) Comprehensive Energy Plan - includes a Sustainable Action Plan for County Operations: <http://frederickcountymd.gov/index.aspx?NID=4353>
- Corvallis (OR) Community Sustainability Final Action Plan: <http://sustainablecorvallis.org/action-plan/download-the-action-plan/>
- Baltimore (MD) Sustainability Plan: www.baltimoresustainability.org/uploads/files/Sustainability_Plan.pdf

- Recognition of leaders and stakeholders who were part of the planning process.
- Topline messages from the Energy Profile.
- Goals and strategies, framed in terms of benefits for the community.
- Actions, laid out by sectors – buildings, energy generation, transportation and land use, and other – and if applicable, broken out by government vs. community.
- High-level overview of other key implementation blueprint components, including:
 - Responsible parties.
 - Timelines and milestones.
 - Financing/funding strategy.
 - Tracking, evaluating, and updates.
 - Public communications and engagement (discussed below under Plan to Use Effective Communication and Public Relations Strategies to Keep the Plan Visible).
 - Alignment with other planning efforts (if desired).
 - Jobs and economic development (if desired).
- Invitation to participate in plan activities.
- A **detailed plan** should also include the full implementation blueprint.

In addition to format, the Team will also need to determine how the plan is going to be developed, including who will be responsible for it and timeline for preparation and distribution. The Plan Manager is a good candidate for leading this effort, or the Team may wish to designate another local government staff member, subcommittee, and/or outside party. Once a general approach for format and drafting process has been developed, the content outline and skeleton of the plan should be built in parallel with the later steps, so that materials can be inserted as they are finalized. Ultimately, the goal is to have the Leadership Team, including the Champion, sign off on a Final CESP as soon after the completion of Steps 1-9 as possible, so that momentum continues into the adoption and implementation phases.

Have the CESP Officially Adopted

Once the plan is finalized, the Leadership Team, headed by the Champion, should recommend it for approval by the City Council, County Commissioners or other appropriate local government body. Try to attain the strongest level of official authorization possible – for example, unanimous adoption by the City Council through resolution. If the CESP has been developed by a subcommittee or subdivision of the local government that has many layers between it and the City Council or County Commissioners, have the plan authorized by each incremental body to provide notice of the deep support for the work. For example, Baltimore, Maryland’s Sustainability Plan includes letters of authorization and support from the city’s Office of Sustainability and Department of Planning, as well as the Mayor.

In the official CESP authorization statement, include language that indicates:

- A statement of support for the vision, and acknowledgement that the local government’s guiding principles are upheld by this work;
- Support for the planning work and acknowledgment of the preparation of the CESP;
- Resolution that the CESP is adopted;
- Resolution that staff may be directed to implement the actions and strategies to achieve the goals and vision provided in the CESP; and
- Resolution that the CESP will be evaluated and updated (periodically – set a specific time frame) by the Leadership Team and other appropriate parties.

Examples of adoption language and methods:

- Pinehurst (NC) Strategic Energy Plan adoption:
www.vopnc.org/Portals/0/SiteContent/BoardDocs/Resolution%2009-26%20Adopt%20Strategic%20Energy%20Plan,%2010-13-09.pdf
- Frederick County (MD) Comprehensive Energy Plan and Sustainable Action Plan for County Operations:
<http://frederickcountymd.gov/DocumentCenter/View/16720>



It is most efficient to get initial approval of the overall plan that expresses general support, and then bring individual policy and/or cost items back for official discussions over time. This will also avoid negative perceptions regarding undue impact of the plan.

Publicize the Adoption and Kick Off of the CESP

The Plan Manager, in coordination with the government’s marketing/public relations specialists and the Leadership Team, should use press releases and public events to highlight the CESP adoption and start to its implementation. Celebrating the adoption and kick off is a great opportunity to:

- Highlight energy issues,
- Rally people around the visions for the future,
- Lay out the plan for achieving that vision, and
- Engage the public to support and participate in the implementation phase.

Make the beginning of this process a positive and highly visible occasion. Be sure to circulate the press release widely, make the adoption and announcement of the plan a public event, and have as many government and community leaders attend. Emphasize the value to taxpayers. Take lots of photos at the event and do any follow-up immediately. Examples of effective kick-off and/or follow-up events include:

- Staging the announcement to occur with another highly visible and popular achievement. For example, at a ribbon cutting for a new energy efficient building, announce the new CESP, and highlight this as the first project to be completed consistent with the plan.
- If a new project is not available, hold a tour of a government/community facility that is already a good example of energy efficiency.
- If possible, announce at same time as the CESP adoption, or soon after, a concrete, well-liked, easy to achieve, and not expensive component of the plan that will be an early focus. For example: community challenges, an energy fair, or popular energy-related policies.
- Trainings on new energy initiatives can also make good early events.
- It is also effective to have a number of CESP actions start early and receive quick public and positive notice. This keeps the plan visible and relevant. The Plan Manager, or the manager for the implementation phase, should check in with those responsible for early plan activities, be sure that they are clear about what is expected, and that they have the resources needed to get started.

Plan to Use Effective Communication and Public Relations Strategies to Keep the CESP Visible

A strategy for ongoing communication and public engagement is part of a well-designed approach to building excitement for the implementation of the CESP. To create a strong strategy, the Plan Manager and Leadership Team should engage local government marketing or public relations specialists or community partners with marketing and outreach expertise for assistance. This can then be done in parallel with the later steps, and the strategy can then be used as actions roll out to keep the public informed and involved – not only building general support, but increasing the participation in activities and helping to improve them based on feedback.

No matter what mechanisms are chosen for the CESP, be sure to:

- Remind constituents of vision and goals often,
- Periodically outline progress achieved toward goals (tie to Step 9),
- Solicit feedback,
- Encourage ongoing participation, and
- When possible, provide information targeted to specific audiences.

The full range of traditional outreach tools can be part of the strategy, depending on who the target audiences are and the ways they can be most-effectively engaged. The following strategies have been found to be effective both for general communication and to encourage behavior related to CESP components:

- Dedicated websites – easily maintained portal to provide up-to-date CESP information; can also serve as a forum for soliciting feedback.
- Social media – interactive, virtual communities (e.g., Facebook, Twitter) that further enable two-way communications. Particularly effective if target audiences are already using these forums.
 - Example: The Greater Cincinnati Energy Alliance (GCEA) regularly engages their community via social media activities. Through posts on the program's Facebook page, GCEA displays pictures of its activities within the community, shares interesting articles and insights about energy efficiency in the area, and announces accomplishments to its 1,000+ (and growing) followers. GCEA also interacts with local community members, businesses, and organizations through regular tweets on Twitter.
- Periodic progress reports– for example, an annual scorecard; particularly effective when coordinated with the jurisdiction's budget reviews, annual reports, or other community milestone reports (also see Step 9).
- Public commitments, pledges, and competitions – staff and/or community members are asked to publicly commit to a specific behavior or engage in competition to reach a target.
- Public prompts – a reminder to make a desired behavior change after you are already predisposed to do it. Effective prompts are specific and are present at the time of the behavior.
- Stakeholder outreach – solicit feedback from energy professionals and other stakeholders throughout implementation. Some options for keeping open lines of communication with stakeholders include:
 - Hosting regular open meetings or calls.
 - Designating a particular staff person as the main point of contact.
 - Surveying key stakeholders (including those not involved with implementing CESP activities).
- Other events – kick-off and implement specific actions, provide information, and encourage participation; particularly effective when coordinated with standing events and/or occurring at locations where the target audience already gathers.
- Media outreach – provide press releases and news stories for highly visible events and activity launches, with detailed facts and visuals to help ensure coverage.
- Advertising – print, broadcast, web, and direct mail advertising can be expensive, but they allow programs to have 100% control of the message. Choose advertisement placements with best reach, and include simple, timely messages that address the audience's personal concerns.

Examples of effective outreach:

- Omaha (NE) Energy Plan www.omahaenergyplan.org/index.php/measuring-success-menu
- Green Energy Match program – San Jose, CA (www.greenenergymatch.org/), part of the San Jose Green Vision <http://greenvision.sanjoseca.gov/>

Resources Recommended for More In-depth Guidance

- DOE Tips and Tools for Promoting Your Energy-Efficiency Project (Webinar)
www1.eere.energy.gov/wip/solutioncenter/pdfs/tips_and_tools_for_promoting_your_energy_efficiency_project_slides.pdf
- DOE Using Social Media to Engage the Community in Energy Efficiency Projects (Webinar)
www1.eere.energy.gov/wip/solutioncenter/pdfs/Using%20Social%20Media%20to%20Engage%20the%20Community%20in%20Energy%20Efficiency%20Projects.pdf

CESP IN ACTION: PROMOTING THE PLAN: SAMPLE PRESS RELEASES

Baltimore: www.baltimoresustainability.org/features/sustainabilityPlan.aspx

City Council adopts Baltimore Sustainability Plan

In March 2009, the Baltimore City Council adopted the Baltimore Sustainability Plan, a broad, community-responsive sustainability agenda that provides a new lens by which to weigh decisions affecting the future of Baltimore.

Over 1,000 Baltimore citizens offered their vision, hard work, and creativity to develop this Plan. The Plan is not an end in of itself, but rather a declaration of the type of community Baltimore wants to be – a community that tends to the quality of life of its people, the health and resilience of its environment, and the long-term success of its economy. While the document offers 131 strategies to assist in meeting the 29 goals identified by the community, it is not a prescriptive work plan. Instead, the Plan is designed to articulate a vision which policy and programmatic decisions can be weighed against by asking “will this action move Baltimore closer to or further away from a sustainable future?” The Plan also serves as an umbrella to connect previously disparate efforts while helping to expose gaps that warrant increased attention. The Baltimore Sustainability Plan represents a crucial step in moving this agenda forward, but in many ways it is still a first step. The real work of implementation will come with the creativity, commitment, and participation of the entire community. There is a role for every citizen, community organization, business, and institution in making this vision for Baltimore a reality.

Explore the Office of Sustainability website for ideas on how you can help be part of the solution.

Denton: www.cityofdenton.com/departments-services/sustainable-denton

The Sustainability Plan: "Simply Sustainable- A Strategic Plan for Denton's Future"

The City of Denton is proud to announce the adoption of its sustainability plan: "Simply Sustainable - A Strategic Plan for Denton's Future." This plan has been in the works for more than two years, and includes much internal and external collaboration. The City is excited to see it adopted and to begin implementation, and tracking the progress. This plan was started with public input and is intended to be a living document that will be revisited on a regular basis, as flexibility and updates are key to continuing the sustainable process in Denton. Click on the link below to download the "Simply Sustainable" Plan. When the plan is revised again, there will be many more opportunities for the community and partners to provide insight and input. Coming soon is a tracking tool and dashboard to help expand communications both internally and to the community as progress is made on the plan's action items. This tool is expected to be available by the end of this summer, so stay tuned and check back for updates! Simply Sustainable 2012

To stay up-to-date on the Sustainability Plans progress keep checking back here, as this will be the site with current information on the plan. Find out more and follow us on Facebook,

To learn more about the City's energy efficiency efforts and the Energy Efficiency and Conservation Block Grant (EECBG) visit the Sustainability/Energy Conservation tab.



CELEBRATE YOUR SUCCESS!!

Now that you have the fruits of your efforts in hand, launch your Community Energy Strategic Plan, and enjoy the benefits of thoughtful planning and successful partnerships...

Good Luck!