

# STEP 6: IDENTIFY AND PRIORITIZE ACTIONS

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

<u>WHY</u>: 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 chose 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.

<u>WHO</u>: 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

<u>WHEN</u>: 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 Lea	dership Team											
Step 2		Identify Stakeholders	Engage Stakeholders										
Step 3			Vision										
Step 4 Energy Pro				rgy Profile									
Step 5					_	oals and trategies							
Step 6							Identii Action	•					
Step 7						Identify Financing							
Step 8							Implementation Blueprint						
Step 9 Monitoring Plan													
Step 10						Scope and Develop Final (FSP					Adopt & Publicize		
Month:	1	2	3	4		5	6	7	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.

# 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/

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 motive 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).

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 lowincome 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			
	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			
Projects and Activities for Local Government Plan	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			
	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			
Government Activities to Influence and Leverage an	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			
Effective Community- wide Plan	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 <u>www.epa.gov/statelocalclimate/resources/strategy-guides.html</u>
- 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 <a href="https://www.epa.gov/statelocalclimate/local/activities/gov-operations.html">www.epa.gov/statelocalclimate/local/activities/gov-operations.html</a>
- 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)
   <u>www1.eere.energy.gov/wip/solutioncenter/pdfs/effective o and m policy in public buildings present</u> ation.pdf
- DOE Best Practices for Establishing Revolving Municipal Funds for Energy Efficiency Projects (Webinar)
   <u>www1.eere.energy.gov/wip/solutioncenter/pdfs/bestpracticesforestablishingmunicipalfundsforenergyefficiencyprojects.pdf</u>
- 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) <a href="https://www.nrel.gov/applying">www.nrel.gov/applying</a> 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 alternativefuel vehicles; downsize the fleet where possible; require contractors to use fuelefficient 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 costeffective 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 <u>www.greeningthebottomline.org/</u>
- 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 mangers 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: <a href="http://pacenow.org/wp-content/uploads/2012/08/PACE-Programs-and-Legislation-at-a-glance">http://pacenow.org/wp-content/uploads/2012/08/PACE-Programs-and-Legislation-at-a-glance</a> 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.