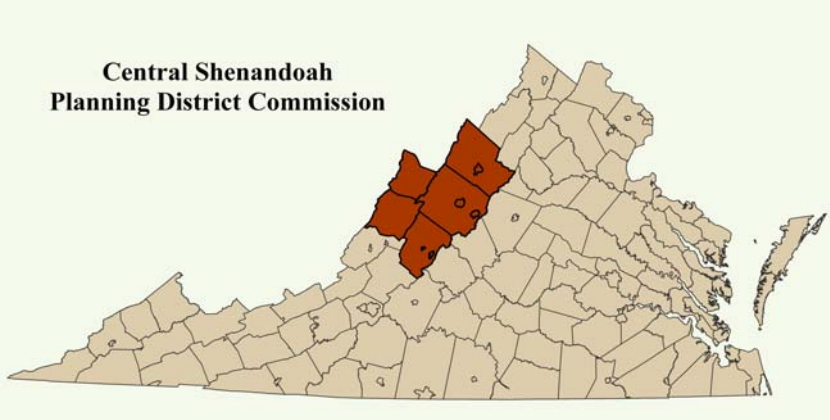
Shenandoah Valley Regional Energy Efficiency Strategy
Detailed Project Description Narrative

The ***Shenandoah Valley Regional Energy Efficiency Strategy*** includes all localities in the Central Shenandoah Planning District except for the City of Harrisonburg which received a direct Energy Efficiency and Conservation Block Grant (EECBG) allocation. The eligible localities include the region's four other cities, five counties, and eleven towns as listed below:

Cities:	Buena Vista, Lexington, Staunton, and Waynesboro
Counties:	Augusta, Bath, Highland, Rockbridge, and Rockingham
Towns:	Bridgewater, Broadway, Craigsville, Dayton, Elkton, Glasgow, Goshen, Grottoes, Monterey, Mount Crawford, and Timberville



The total population of the Central Shenandoah Region is estimated at 278,350 people. The localities in the Central Shenandoah Region vary from towns of 250 people to the growing Harrisonburg-Rockingham metropolitan area which exceeds 120,000 people. No matter the size of the locality, all are in need of tools to make their communities more energy efficient.

The ***Shenandoah Valley Regional Energy Efficiency Strategy*** is designed as a methodical, comprehensive, and affordable strategy for each of the 20 eligible local governments in the Central Shenandoah Planning District as well as for the office building of the CSPDC. The purpose is to reduce their total energy consumption, to increase their energy efficiency, and to reduce energy costs. This will be accomplished through a comprehensive plan to provide energy audits for public buildings and facilities and to jump-start energy implementation projects throughout the region.

The first component of the project includes the procurement of a certified energy audit firm(s) to conduct preliminary energy audits of public buildings and facilities in the region. The second component of the project will enable local governments to implement one or more of the energy saving recommendations identified in the audits by giving them access to a pool of matching funds to complete the project. The final component is an energy education program that is intended to establish on-going opportunities to learn and to teach energy saving measures. The beauty of this project is that it will leverage local public dollars and continue beyond the funding cycle with benefits realized for years to come.

Now more than ever, our local governments are committed to reducing operational costs to save money. Especially during this fiscal year, many of our localities have had to make staff reductions, layoffs, and furloughs. Local government staff and elected officials are looking for ways to save money, stabilize their budgets, and retain their workforce. Many of our jurisdictions have created "green committees" to look at ways to reduce energy consumption and reduce energy costs, but these groups either do not have the staff resources or expertise to develop a strategy for gaining the greatest benefit.

This project will enable local governments to methodically develop a strategy that will give them the information, data, and tools needed to go forward with a plan to reduce energy usage and to save money. This will be accomplished through the building and facility energy audit process, and ultimately, through the implementation of the recommendations made in the building audits. The benefits will be immediate and sustainable.

How the Project will Work

The CSPDC will be the lead entity providing coordination services and grant management services for each of the local governments in the region. A project team will be created representing staff of the CSPDC and each of the local jurisdictions participating in the program. In accordance with the Virginia Procurement Act, the CSPDC will procure the services of a qualified energy audit firm(s) to work with each of the local governments to provide energy audits of their buildings and facilities.

The local governments will have the opportunity to identify and select the buildings and facilities that they would like audited. Once the energy audits are performed and recommendations and cost estimates are made for energy improvements, the local governments will have access to a pool of matching grant funds to implement the recommendations.

A final component of the project will include the establishment of a regional program to provide on-going education, outreach, and training to promote energy conservation and efficiency throughout the region. A variety of programs is anticipated in order to reach out to local government staff, elected officials, the general public, and other energy partners. This program will directly and indirectly benefit over 270,000 citizens in the Valley.

Component I – Energy Audits of Public Buildings and Facilities
Cost of Component I - $123,000

The local jurisdictions and government staff understand the value in having a comprehensive energy plan that describes the most effective and efficient measures to address needs. Unfortunately, most of our local governments do not have the financial resources, staff, or expertise to have an energy audit performed on their public buildings and facilities. A few of the region's local governments have entered into performance contracts for energy audits. However, they often still lack the up-front costs associated

with the project implementation phase of the energy audit findings because of substantial cuts made in their capital improvement budgets. Therefore, our local governments have indicated their interest, willingness, and commitment in securing funds to have the energy audit plans prepared for them.

This phase of the project will give local governments the foundation to move forward with a precise and comprehensive strategy to make huge strides in reducing their energy consumption and saving on energy costs. The impacts are immediate in stimulating the local economy, creating and retaining local private and public sector jobs, stabilizing local budgets, and improving the environment. With a long-term energy strategy, these benefits may be sustained.

There are several types of energy audits. These include the following:

- Opportunity Audit. Non-quantitative identification of energy-savings opportunities, often called a "walk-through" audit.

- Preliminary Audit. Identification of energy-savings opportunities with estimates including energy savings, dollar savings, carbon dioxide and greenhouse gas emissions, and implementation costs.

- Investment Grade Audit/Detailed Energy Study. Similar to a preliminary assessment except in greater detail and completeness. The final stage of performance contract analysis includes guaranteed saving and guaranteed implementation costs.

This project will allow for local governments to complete an opportunity audit and preliminary assessment. Those that can afford it may complete a detailed energy study at their own expense.

The local governments will work collaboratively with the energy auditing firm to complete the steps of the energy audit such as:

- Gathering historic utility consumption information and costs
- Reviewing building drawings
- Accompanying the auditor on building/facility site visits and evaluations
- Calculating savings opportunities
- Evaluating utility rates and rate structures
- Estimating costs
- Calculating paybacks
- Developing an implementation plan

Component II – Energy Project Implementation
Cost of Component II - $240,000 (grant); $60,000 (leverage)

Component II of the ***Shenandoah Valley Regional Energy Efficiency Strategy*** is implementation of the energy audits' recommendations. Once the energy audits are performed and recommendations are prioritized, the local governments will have access to a pool of matching grant funds to implement the recommendations. Local governments will decide on which projects will be of the greatest benefit to them.

It is estimated that $240,000 in grant funds will need to be made available to local governments to implement energy projects. This will be matched with $60,000 in local funds. The funding of energy projects will be structured so that each locality will have set-aside funds up to a certain dollar amount. We envision a two tiered system. Each town will have access to an equal share; the city and county allocations will be equal. It is anticipated that far more than $60,000 will be leveraged as communities use additional local funds to implement and complete projects.

Many of the region's public buildings and facilities are older and inefficient. A program to upgrade mechanical systems, weatherize, and install renewable energy technologies will provide both immediate results as well as long term benefits in terms of energy savings for each of our 20 local governments.

Energy saving and conservation projects may include, but not be limited, to the following:

- Upgrades and/or replacement of light and lighting controls
- Water efficiency and conservation measures (i.e. low-flow toilets)
- Upgrades and/or replacement of outdated mechanical systems
- Temperature controls/smart meters
- Weatherization/insulation
- Roof, window, door replacements and improvements
- Street/parking/traffic light improvements
- Automated meter reading/leak detection
- Installation of renewable energy sources (i.e. wind, solar, bio-fuels)
- LEED certification

The actions of Component I and II will increase the energy efficiency of public buildings and facilities. They will reduce energy costs to local governments which is particularly important during this time of strained local budgets. Furthermore, the local economy will be stimulated with green jobs, construction and contracting jobs, and related spin-off jobs as well as with an increase in demand for green materials.

Component III – Education, Outreach and Training
Cost of Component III - $22,000

The third component of the project will include education, outreach, and training for energy efficiency and conservation planning and programs throughout the region. Some of our localities have created "green committees," but these groups lack the tools and

expertise to devise a comprehensive energy strategy for their locality. This project will enable the localities to come together on a regional basis to share best management practices, enhance their local energy programs, and develop a program to educate local government staff and the general public about energy efficiency and conservation.

A Regional Energy Consortium will be established bringing together the following experts and stakeholders:

- Local and regional government staff
- Elected officials
- Natural resource personnel
- Energy managers and administrators
- Public works directors
- Building officials
- Recycling coordinators
- Local and regional planners
- Natural resource educators

The goal of the program would be simple:

> Promote energy efficiency and conservation in the public sector and encourage that energy policies and programs established by local governments are incorporated into such documents as comprehensive plans, capital improvement programs, land use plans, building codes, and solid waste plans.

The CSPDC will provide the staff support and project management services for the regional group. It makes sense to coordinate this project through a centralized and regional entity like the CSPDC for numerous reasons. The purpose of the CSPDC is to encourage and facilitate local government cooperation and state-local cooperation in addressing, on a regional basis, problems of greater than local significance. For forty years, the CSPDC has been providing planning services and technical assistance to its member jurisdictions with issues including; comprehensive and land use planning, transportation, solid waste management, water and wastewater utilities, affordable housing, economic and community development, wind energy education and siting, and natural resource management.

Energy efficiency and conservation planning and programming is another area that the CSPDC is able to assist its local governments through a coordinated and comprehensive process. This process includes analysis, vision, action planning, and evaluation based upon the input and participation of stakeholders. The CSPDC is effective in assisting its local governments in energy efficiency and conservation because, among other things, it is responsible for the following:

- Coordinating projects of regional significance
- Identifying and studying opportunities for local cost savings and staff efficiencies through a coordinated regional effort
- Serving as a liaison between local governments and state and/or federal agencies
- Serving as an affiliate of the State data center and collecting and maintaining demographic, economic, and related data for the region and its member governments

In this role, the CSPDC is well positioned to coordinate not only the education component of this project but also the coordination of the audits and implementation process. Furthermore, this project advances related regional strategic initiatives adopted by the CSPDC Board and endorsed by 70 stakeholders in the region. These key strategic initiatives address smart growth strategies, economic development efforts, inter-governmental cooperation and partnership, and support the unique and special needs or our numerous localities. This year a strategy was added regarding renewable energy and green jobs.

Unique Features of the Project

Regional Partnership. This project is a multi-jurisdictional project that will serve 20 of the 21 localities in the Central Shenandoah Region; the City of Harrisonburg received a direct EECBG allocation. Funding for this project will serve a wide variety of localities including small- and mid-sized urban areas as well as rural jurisdictions.

The Central Shenandoah Region is geographically Virginia's largest planning district. It has a land area of 3,439 square miles. It is the state's fifth most populated planning district with over 278,000 people calling it home. Many of our smaller jurisdictions, particularly the 11 towns, do not have sufficient staff or resources to submit an application or implement a project under the EECBG program. They have requested the assistance of the CSPDC to apply for energy grant funds and to coordinate and manage any funding award. This allows our localities to focus on developing projects that will benefit, either directly or indirectly, their residents and businesses.

Leveraged Funds. The project is designed to leverage local funds. As described in Component II, EECBG funds will be used to establish implementation funding for energy efficiency and conservation projects. EECBG funds in the amount of $240,000 will be set aside for the implementation of energy efficiency projects. A formula will be developed so that each locality has access to funds on a fair and equitable basis. The grant funds would be matched on an 80/20 basis; 80 percent through the grant and 20 percent by the locality.

It is anticipated that some of the localities will be able to budget for and fund projects that go beyond the allowable set-aside. Additionally, localities that require a more detailed energy audit will pay for it at their own expense or enter into a performance contract with a certified energy auditor. It is estimated that the project will generate at least $60,000 in local leveraged funds.

Job Creation and Economic Development. This project will create and retain jobs in both the private sector and the public sector. Jobs will be created and retained as result of the number of energy audits that will be required. With 20 local jurisdictions represented in our region, each with numerous public buildings and facilities, the need for energy audits in our region is great. Energy audit firms will have an opportunity to hire trained professionals in order to conduct the audits and develop plans for the local governments.

Additionally, this project will create and retain local jobs with the implementation phase of the project. Installation of energy conservation measures like weatherization

materials, mechanical heating and cooling improvements, and new energy technologies will stimulate the local economy in terms of jobs. With these energy saving measures in place, local governments will see a reduction in their utility bills that will result in overall budget improvements. This will allow local governments to retain, and ultimately, re-hire personnel at the local level.

Public Support. There has been a tremendous amount of support for this project and its coordinated and systematic approach. The Board of Commissioners of the Central Shenandoah Planning District Commission, of which all our localities are represented, has endorsed a Resolution of Support for this project. This Resolution shows the commitment and willingness of the 20 local governments and their elected officials for this project. (Resolution attached**)**

Transparency. As an agency, the Central Shenandoah Planning District Commission has been in operation for forty years. Most of the work that the CSPDC provides to its member localities is supported by either a federal or state grant. In addition to grants used to provide planning and technical services to our members, we also administer grants for our localities. Many prefer our agency to carry out these activities because of our familiarity with the grant process, our fiscal capacity to administer state and federal grants, and our coordination with the funding agencies. We are familiar with the necessary oversight, state procurement process, and reporting details that are required with grant administration. The state and federal grants that we administer are continually monitored and audited. Furthermore, the CSPDC is very familiar with the Davis-Bacon Act and will ensure that this project meets all the labor standard wage requirements of the Act.

The CSPDC understands that the funding of the EECBG program as administered through the Department of Mines, Minerals, and Energy will follow all ARRA reporting requirements. As shown in Section E of this application, Scope of Work and Schedule, the project will be completed within the required timeframe. Well beyond the end of the grant period, localities will continue to implement their energy efficiency recommendations and use the knowledge gained through the educational opportunities associated with this project.

Summary

The ***Shenandoah Valley Regional Energy Efficiency Strategy*** is a complete approach to energy planning. The project:

- Develops an implementation plan tailored to needs of each of our localities
- Provides funding to jump-start energy projects in each of the 20 eligible localities
- Supports continued education and training in advancing energy efficiency and conservation projects

The positive spin-offs from this project include the following:

- Job creation, particularly energy-related and green jobs
- Decreased energy consumption
- Decreased energy costs for local governments

- Job retention and rehiring of local government personnel
- Strengthened partnerships among localities and energy stakeholders
- Energy plans for sustainable growth
- Reduced impact on the environment in the form of reduced fossil fuel emissions
- Increased tools for local governments to address energy use and its impacts
- Increased involvement in public education efforts to reduce public sector, residential, and business energy costs
- Development of a model energy strategy for other regions to replicate

The ***Shenandoah Valley Regional Energy Efficiency Strategy*** is in line with the Virginia State Energy Plan. According to the Plan, energy efficiency and conservation is the first area of action for securing our energy future. This project gives the 20 eligible localities in the Central Shenandoah Planning District as well as the CSPDC a set of tools to address energy efficiency and conservation. It gives each locality greater control over their energy decisions by providing an audit of needed energy improvements.

This project incorporates seed money to jump-start those improvements but goes beyond that with the audits' list of recommendations as well as education and training. The audit allows the locality to incorporate the recommendations into its capital improvement program so that the list of energy projects is accomplished over a more affordable and manageable period of time. The education and training allows the exchange of information between our localities to continually expand the toolbox of energy efficiency strategies.

Making existing public buildings energy efficient is a smart way to address energy efficiency. It costs much less than developing many types of new energy sources. It is accomplished building by building on a manageable schedule and financial and environmental benefits are immediate. Furthermore, these energy saving efforts may be linked to job creation and retention.

The CSPDC is submitting this application on behalf of all our localities because it is an innovative way to address energy efficiency in our region. Many of our localities do not have the staff and resources to research funding options, submit grant applications, and administer grants. This application provides them the opportunity, along with their neighboring localities, to become more energy efficient and less affected by energy cost fluctuations. The project demonstrates economy of scale and critical mass. Combining local energy efforts through the ***Shenandoah Valley Energy Efficiency Strategy*** creates a healthier region for all of our localities as it relates to the environment, economic competiveness, fiscal budgets, and regional cooperation and partnerships.