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To: Board of County Commissioners
From: Planning Commission
Date: February 15, 2013
Re: Carbon Policy Recommendations for the Strategic Plan

The BOCC of County Commissioners (BOCC) has directed the Planning Commission (PC) to provide recommendations on carbon policy relative to the BOCC's Strategic Plan. The Planning Commission makes the following recommendations to the Board of County Commissioners.

Recommended Strategic Result:
By 2014, fund x% of the ORE Energy Smart Program and an ORE education program addressing energy efficiency in rental housing.

Identify by 2014 possible options for the creation of an ongoing revenue stream to fund the Energy Smart Program and/or rebates for energy efficiency upgrades to existing buildings and recommend by 2015 a revenue stream source for the program(s).

By 2014 an employee of the Housing Authority shall be certified to instruct "First Time Homebuyer" classes which meet state and federal requirements.

The strategic measures that would support this strategic result are:

- Designate continued funding for the Business and Home Energy Smart program currently provided by ORE.
- Determine if the International Energy Conservation Code (IECC) can be adopted every three years while continuing to adopt the International Building Code (IBC) every six years.
- Research options for creation of a revenue stream for the Energy Smart Program and/or rebates for energy efficient upgrades to existing buildings.
- County subsidized housing shall have energy audits completed for all buildings and begin the process of upgrading existing buildings to be more energy efficient. It is critical that the County be the leader in this effort and set the example for the citizens of Gunnison County.
- Any County funded housing shall be energy efficient and meet the requirements of 2009 IECC
- Determine feasibility for reduced permitting fees or expedited processing for additions and remodels that seek to increase energy efficiency.
- Utilize the skills of Molly Mugglestone, County communications consultant to create a centralized effort to address potential grant funding sources for the above items.

Existing buildings are the one of the largest sources of inefficient energy use in Gunnison County. To continue addressing remodeling and retrofitting of existing buildings we recommend that the BOCC increase the funding support for building retrofits and remodels. The Office for Resource Efficiency (ORE) currently provides subsidized energy assessments and some upgrades to Gunnison County residents and businesses through federal funding. Providing support for ORE's Energy Smart Program

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to sustain these services after federal funding expires will enable additional residents and businesses to reduce their energy consumption. The Energy Smart Program also supports the strategy of "Promote Healthy Communities" by identifying, mitigating and educating the public on building health and life safety issues such as combustion air zone problems and radon.

We recommend that the BOCC investigate the creation of an ongoing revenue stream to fund Energy Smart and/or rebates for energy efficiency upgrades in existing buildings. Eagle County has created an "Eco Build" program that requires buildings to achieve a specific number of points, based on the square footage of the building, using energy efficiency measures. If the number of points cannot be achieved the County requires payment into an Eco Build rebate fund. The funds are then used for rebates on energy efficiency measures for existing buildings. Pitkin County has adopted the Renewable Energy Mitigation Program (REMP) which charges building owners a fee if a new residence exceeds 5,000 square feet and/or if they exceed the allowed energy budget as defined by the program. Fees collected are then used to fund energy efficiency measures. It appears that the intention of both programs is not to penalize smaller, average size homes but to require that larger homes or homes with heated outdoor areas (pools, driveways, sidewalks) pay an additional fee based on their additional energy consumption or total square footage.

We also recommend that the BOCC fund an education program to be managed and conducted by ORE. The education program should be directed at renters and especially college students to provide education on the benefits of renting an energy efficient home and requesting information on utility bills when searching for a rental. This will likely accomplish the goal of getting the market to respond to the need for energy efficient units. Education of renters will eventually demand that property owners upgrade their buildings to be more energy efficient thereby creating a better stock of property rentals.

Education about energy efficiency should also be extended to first time homebuyers. Many first time homebuyers are required by state and federal lending agencies to attend a "First Time Homebuyer" class; the closest classes available are in Grand Junction and Pueblo. We recommend that an employee of the Housing Authority become a certified "First Time Homebuyer" instructor (to meet state and federal certification requirements). We also recommend that energy efficiency be included as a portion of the curriculum. This will enable new homebuyers to understand the implications of energy efficiency and how it can impact their monthly budget. It will also serve to impact the marketplace in a way that is not regulatory but instead creates better education and may result in increased demand for energy efficient homes.

The County should also act as the leader in remodeling existing housing. Existing County subsidized residential buildings should have an energy audit completed and begin the process of upgrading the existing buildings to be more energy efficient. We recommend that the County include any audit/remodel efforts as part of its Communications Plan and do a press release describing the initiative.

Recommended Strategic Result:
By 2014 amend the Gunnison County Land Use Resolution (LUR) to include comprehensive energy, waste and transportation standards for new, large subdivisions.

Identifying areas appropriate for future growth and developing regulatory policy to allow that is critical to this recommendation. Marlene Crosby, Director of Public Works and Assistant County Manager, noted that "encouraging development of existing lots or encouraging building close to existing population centers is one of the most important points of the plan. We have tried to increase our level of service to subdivisions within the City of Gunnison's three mile planning area and also those close to CB, Mt. CB and CB South. The cost of mobilizing a plow to a subdivision one mile north vs. 12 miles north is huge. Encouraging growth close to the City was a strong selling point for the North Gunnison Sewer project which extended the sewer line north nearly to the 3 mile boundary."

Studies done by RPI Consulting of Durango and the Sonoran Institute have found that outlying, rural development increases county costs for infrastructure and services and is not offset by the tax revenue generated by these outlying developments. Their study, done in Wyoming, found that outlying lots covered 10% of county operational costs and 31% of capital costs for infrastructure and other services. These recommendations could be considered as a performance based system where an applicant could pick and choose from a variety of options. The recommendation could be used as one tool in managing growth and development in a manner that minimizes costs to the County and reduces energy consumption.

Recommended Strategic Result:
Identify by 2015 options for mitigating transportation impacts for each new major impact subdivision.

The County commissioned a report in 2009, "Gunnison County Road and Bridge Capital Expansion Impact Fee," that reviewed options for impact fees. At that time the BOCC decided not to adopt an impact fee due to existing economic conditions. It is recommended that the BOCC include the above recommendation as a strategic result in order to research other options available to the County for mitigating transportation impacts.

Recommended Strategic Result:
By 2014 amend the application for a SDPR permit from Gunnison County shall include projection and analysis of the project's energy impact:

- ***i. Annual energy consumption projection during its construction and operation phases.***
- ***ii. Identification and analysis of energy source options for the project during its construction and operation phases, together with a rationale for the sources selected. Potential sources of energy within Gunnison County must be considered.***
- ***iii. A plan for annually assessing the project's energy consumption during construction and operation.***
- ***iv. A projection of new energy transmission infrastructure that will be required by the project.***

And, Require SDPRs to minimize CO_{2E} emissions and energy use by requiring applicants to designate a set of best energy practices to be used during their construction and operation phases. These best energy practices must be based on accepted science and industry standards.

SDPRs are large-scale projects and their energy consumption and efficiency may have a significant impact on Gunnison County. While the regulations include a substantial number of related plan submittal requirements, design and construction standards and requirements for ensured financing (including for impact mitigation), the Carbon Policy Task Force has suggested that additional measures be included. Amending the SDPRs to include additional energy information and best practices could strengthen the regulatory component for these projects. The above recommendations serve as information and data for Gunnison County. They don't demand that the projects be carbon neutral, but would increase requirements in data collection and project management.

Recommended Strategic Result:
Identify by 2014 County-owned assets (e.g. land, rooftops, etc.) for potential designation towards community energy projects.

This recommendation can be considered as data collection for future use. It would enable the County to

understand exactly what resources it has and thus may enable some future use of those resources for energy production.

Cost Analysis
A cost analysis has not been completed for the Carbon Policy Task Force recommendations. In consideration of the Strategic Plan deadline there was not time to complete a thorough cost analysis of each of the recommendations. After further direction from the Board of County Commissioners, staff can begin researching cost/benefit information. Cost analysis may require outside consultation, depending on the recommendation.

Background Information
Please consider some background information and context on the importance of carbon emissions and energy efficiency. Carbon policies and energy efficiency measures have a range of costs and benefits. Without any action we can expect economic and environmental impacts to occur in Gunnison County. The Aspen Global Change Institute (ABGI) and data from the United Nations Panel on Climate Change noted that Pitkin County will experience significant economic impacts from climate change. Those reports also noted that ski areas are likely to experience financial losses as winters become shorter and warmer. ABGI found that losses of 5% to 20% of skier days by 2030 could result in financial losses of $16 million to $56 million in the City of Aspen and Pitkin County area. Gunnison County also relies on the ski industry as part of a recreation based tourism economy and can expect that economic impacts will also occur in Gunnison County due to climate change. Crested Butte Mountain Resort will likely have fewer ski days causing revenue losses because winter will be shorter, according to ABGI. A study done for the City of Aspen projects that the local ski season could be a week and a half shorter by 2030 and four to ten weeks shorter by 2100. Auden Schendler, Vice-President of Sustainability for Aspen Skiing Company noted that, “Ski resorts operate in deficit until March, when we make most of our profit. If you shorten our season on either end—take away March, for example—and we go out of business. The problem: a shortened season is one of the most reliable predictions of climate modeling and science.”

Hotter and drier: The West’s changed climate, notes that ski areas, agriculture, and hunting and fishing are already being impacted by climate change along with noticeable impacts to local economies that depend on those industries for revenue. Hunting and fishing industries will be impacted as habitats are lost and fish and wildlife numbers drop, leading to fewer available hunting and fishing licenses issued by the State of Colorado. In Colorado in 2002, the drought reduced business for outfitters by an estimated 40 percent. About one million fishing recreation days were lost and 93,000 fewer fishing licenses were sold, with a corresponding $1.8 million loss for the Colorado Division of Wildlife. We can expect the same to be true of the 2012 drought. Agricultural operations will also suffer losses in the form of less irrigation water for hay meadows due to droughts.

In consideration of the direction from the BOCC, staff has reviewed the Carbon Policy Task Force recommendations and the BOCC Strategic Plan to identify areas for the BOCC to include carbon policy in the Strategic Plan. Staff has identified several different strategic results and which are included below from large-scale to small scale.

References
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