

Park County Energy Plan Draft

Version 3 – November 4, 2010

Strategy (approved by the BOCC in April 2010)

Objective: the Board of County Commissioners (BOCC) will sponsor an efficient energy / renewable energy initiative throughout the county with the objective of providing more stable and lower energy costs for the Park county community. The expectation is that these programs will also contribute economic development within the county by creating new businesses and new job opportunities.

Approach:

The program scope will include a public awareness aspect and pursuing opportunities in residential, commercial and community buildings. The strategy will be to focus on efforts where Park County can leverage its strengths (such as excellent solar exposure and ready source of biomass) to participate in the Colorado's New Energy Economy funding.

Park County will partner with Summit and Lake Counties for the implementation of the Governor's Energy Office program on energy efficiency through joint work with High Country Conservation in Summit County; through this partnership, Park County will be able to leverage the existing programs and expertise of High Country Conservation in energy efficiency and grant writing resources.

The BOCC will delegate to the Energy Efficiency – Renewable Energy Initiative the development and execution of the county wide program to implement this strategy. The EERE Initiative will pursue state and Federal grants to support this county wide effort.

The EERE Initiative / Park County CEC will provide periodic updates to the BOCC on the implementation of the program and the BOCC will provide guidance and strategic direction for the overall program.

2010 Goals

- 1. Goal: Implement a Proactive General EERE Public Outreach Campaign. Promote culture of conservation.**
 - a. Action Item 1 – Provide communication booth at Park County Summer and Winter events each year (literature, surveys to collect public comments)**
 - i. Summer events – Alma Festival, Bailey Day, Como July 4, Burro Days, Hartsel Days, Guffey July 4
 - ii. Winter events – Bailey Extravaganza, Fairplay Holiday Bazaar, Making Spirits Bright (Holiday production in Fairplay)
 - iii. Provide Outreach Materials: Xcel Energy 60 ways to save energy and money, Energy Star materials, State outreach materials when available, internal Park County overviews
 - iv. 2010 Status: 7 events were attended and exhibit conducted, 20-50 contacts made per event; literature was distributed at all events
 - v. 2011 Targets: At least 6 Park County events will be attended, with 20-50 contacts made per event.
 - b. Action Item 2 – Conduct informal meetings (monthly / quarterly as appropriate)**
 - i. Conduct drop-in coffee house session in Alma (jointly with innovative). Try one session in 1st quarter 2011, evaluate and repeat if successful.
 - ii. Energy Efficiency or Renewable Energy community-forum in Bailey area at community/social venues (Energy on Tap). One community-forum will be conducted by February 2011, evaluated, revised and repeated throughout the year.

- iii. Outreach presentations to organizations: HOAs, Chambers of Commerce, Bailey contractor group, target 6 in 2011.
 - iv. 2010 Status: Outreach sessions held with 3 Home Owner Association meetings, 2 Chamber of Commerce meetings in 2010.
 - v. 2011 Target: 6 community forums or drop in sessions through-out 2011. In addition, 6 outreach sessions at local organizations (HOAs, Chambers, Building Association).
- c. Action Item 3 – Advertisements in newspapers, via flyers and, handouts, by email**
- i. Implement in conjunction with Summit County CEC.
 - ii. Newspaper – The Flume does not allow press releases, but Park CEC will contact reporters with significant announcements. Events/announcements will be placed in the Flume’s community corner as appropriate. Advertisements will be purchased as necessary.
 - iii. Flyers and handouts at post office and local venues – target 20 places
 - iv. Email – EERE database of approx 50 people. Target, grow this database by 50 to 100.
 - v. 2010 Status: Flyers and handouts at approx 20 venues for events and rebates. E-database grown to 50 people.
 - vi. 2011 Target: At least 4 articles in Flume. Flyers and handouts distributed to approx 20 venues. E database grown to 100 people.
- d. Action Item 4 – Provide information on the Park County EERE website**
- i. 2010 Status: Park County EERE website has been established and basic information posted.
 - ii. 2011 target: Park CEC will update web-site monthly, ensure links to HC3 and GEO sites.
- e. Action Item 5 – Participate in local Chamber of Commerce organizations and functions. Participate in regional energy sessions.**
- i. 2010 Status. Participated in Platte Canyon Chamber and South Park Chamber.
 - ii. 2011 Target: Continue to participate in Chamber sessions. Attend Lake and Summit Energy Planning Sessions (one session/month), Governor’s Energy office trainings (one session every other month).

B. Goal: Promote Energy Efficiency & Renewable Energy in Residential Applications

- a. Action Item 1: Provide Park County, Town of Fairplay and Town of Alma with information packets on both EE and RE for distribution with building permit packages**
- i. 2010 Status: Information packets provided, towns and county updated.
 - ii. 2011 Target: Continue to provide quarterly updates to towns and the County.
- b. Action Item 2: Provide information on incentives and rebates in Outreach Sessions**
- i. 2010 status: Energy Star and Xcel Energy, Governor’s Energy Office efficiency brochures obtained and distributed.
 - ii. 2011: Continue to obtain and distribute relevant information.
- c. Action Item 3: Promote the concept of home audits.**
- i. Provide information on average energy consumption in Park County.
 - ii. Provide process for homeowner self-audits.
 - iii. Provide information on professional audits.
 - iv. Pursue growth of energy audit market.

1. Promote training for energy auditors (regional Building Performance Institute, BPI training, ENERGY STAR). Target – BPI training will be available. ENERGY STAR training will be available to local contractors.
 2. Pursue acquisition of energy audit equipment to be used in Park County.
- v. 2010 Status: Three BPI trainings were held in Denver and Salida area. Energy audit equipment acquired for local energy assessors (to be purchased by January 2011).
 - vi. 2011 Targets: One ENERGY STAR training will be held in Park County (High Country Conservation Center). Continue to provide relevant training opportunities. Rent out newly acquired audit equipment and track use. Include information on audits and energy consumption in outreach campaign.
- d. **Action Item 4: Provide information on financial programs that homeowners may find useful, note that some of these are in the development stages in Colorado**
 - i. 2010 Status: Developments of Property Assessed Clean Energy (PACE), Solar Gardens were followed.
 - ii. 2011 Actions: Continue to seek out innovative financing mechanisms.
 - e. **Continue to gather aggregate energy data and use it to inform energy decisions.**
 - i. 2010 Status: Xcel data has been obtained for commercial, public and residential premises.
 - ii. 2011 Actions: Continue to gather Xcel data and monitor. Continue to try to work with IREA to try to obtain data. Continue to gather rebate data and monitor for Park County. Use data to inform energy decisions. Use tracking to help understanding of energy use.
- C. Goal: Promote Energy Efficiency and Renewable Energy in County & Town Buildings.**
- a. **Action Item 1: Develop a biomass supply chain strategy and promote implementation.**
 - i. 2010 Status: Supply chain strategy completed.
 - ii. 2011 Actions: Provide supply chain to relevant parties. Update county commissioners and relevant biomass projects.
 - b. **Action Item 2: Support use of biomass in new Fairplay school facilities.**
 - i. 2010 Status: School is currently implementing biomass heating project. Start date approx January 2012.
 - ii. 2011 Actions: Continue to address project and any issues.
 - c. **Action Item 3: Promote the district heating concept for the county buildings off CR 16 in Fairplay**
 - i. 2011 Actions: Complete feasibility study February 2011. If feasible, pursue a project.
 - d. **Action Item 4: Support EE and RE feasibility work at Platte Canyon Re-1 school complex in Bailey**
 - i. 2011 Actions: Continue to be an active member of school energy committee. Continue to support efforts.
 - e. **Action Item 5: Support investigation of combined heat and power (CHP) system or solar thermal power system for Fairplay Sanitation District.**
 - i. 2011 Targets: Continue to investigate.
 - f. **Action Item 7: Investigate opportunities for viable solar and wind energy applications**
 - g. **Action Item 8: Implement tracking, energy audits and subsequent energy conservation measures in all public buildings. Publicize successes (Lead by Example). Encourage tracking in public buildings.**

D. Goal: Promote Energy Efficiency and Renewable Energy in Commercial Buildings

a. Action Item 1: Develop program.

- i. Develop and implement commercial energy efficiency program – starting in Fairplay. Funding has been secured from Governor’s Energy Office and local partners.
- ii. 2011 Target: Conducts audits and improvements in 10 businesses in year one.

E. Goal: Promote Solar Applications

- a. **Action Item 1: Pursue opportunities in the county when state regulations are developed in 2011, options include solar gardens, innovative funding mechanisms for solar, solar thermal.**
- b. **Action Item 2: Develop promotional literature, case studies and success stories. Tie solar applications into outreach campaign as appropriate.**

F. Goal: Promote other renewable energy applications as determined viable.

- a. **Action Item 1: Pursue specific areas where wind may be viable**
- b. **Action Item 2: Obtain data from recent anemometer testing in Park County**
- c. **Action Item 3: Applications for additional anemometer testing**
- d. **2010 Status: Data from 5 additional anemometer 2 year tests have been provided to CSU; analysis has been posted on the CSU website.**

G. Goal: Investigate Potential Transportation Projects

- a. **Action Item 1: Assess impacts of carpooling or public transportation.**
- b. **Action Item 2: SWOT assessment for high traffic Bailey to Morrison corridor.**
- c. **Action Item 3: Pursue public input for Fairplay to Summit County corridor.**

H. Goal: Support current recycling efforts

- a. **Action Item 1: South Park area recycling is now funded through a grant, received by Vision 2020 organization (launched in October 2010). Fairplay now has a transfer station.**
- b. **Action Item 2: Stay informed of effort and see if there is a way to support it.**

I. Goal: Work with existing organizations (such as CUSP) to develop opportunities for water conservation

- a. **Action Item 1: Incorporate water conservation into the outreach program.**

APPENDIX

SWOT Analysis

Strengths

- High altitude solar exposure, with relatively cool temperatures
- Biomass availability in county
- Learnings from project work in other counties completed
- Geothermal application in Hartsel
- Wind: investigate having a company set up a high altitude development center or set up a test wind generator in selected wind corridor

Weaknesses

- No current organized biomass supply chain
- Not much processed biomass demand today
- Variability of wind throughout the year and county; high wind gusts
- Dispersed population in the county
- High impact of economic recession – 2008 to current
- Limited county and town resources
- No incorporated areas in Platte Canyon area where > ½ the county population is based
- Limited commercial business in the county
- Most contractors / labor force are oriented toward new residential construction; primary business is outside Park County (i.e. Summit, Jefferson Counties)
- Lack of labor to do seal and insulate projects

Opportunities

- Develop pilot projects to demonstrate feasibility
- Communicate economic advantages of EERE
- Seal and insulate programs should pay good returns
- Develop active builder organizations to emphasize EERE work
- Promote positive results from RE implementations in Park County
- Promote positive results from EE implementations in Park County
- Obtain wind anemometer test data for Eon 2009 tests in Park County

Threats

- Public perception that solar is expensive
- Public perception that solar does not work well (Platte Canyon HS experience)
- Public perception that biomass will not be available long term
- Public perception that biomass will produce unacceptable emissions
- Public perception that EERE programs are being forced upon them
- Negative perception of government involvement
- Very limited county / town resources for matching funds and organizational structure