



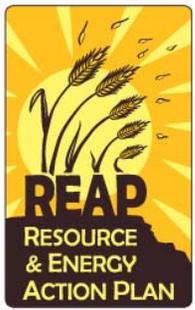
Resource and Energy Action Plan (REAP) Strategy:

A Guide for Action Plan Creation

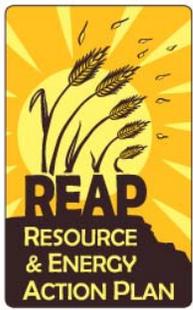
February 28, 2011
Revised June 27, 2012

This planning report was prepared with funding from the Colorado Governor's Energy Office. This report will be available on the Internet for an indefinite length of time at WWW.FOURCORE.ORG/REAP. 4CORE has made every reasonable effort to assure the accuracy of the information contained herein. However, the contents and sources upon which it is based are subject to changes, omissions and errors.

THIS DOCUMENT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE USER ASSUMES THE ENTIRE RISK AS TO THE ACCURACY AND THE USE OF THIS DOCUMENT AND ANY RELATED OR LINKED DOCUMENTS.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

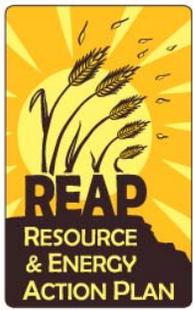


Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Change Documentation Page

(for any document modifications)

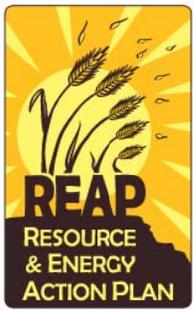
Date	Change Description	Affected Page Number(s)
3/28/2012	Modified web address where REAP documents are found	7
3/28/2012	Update S.M.A.R.T. Goals	10
3/28/2012	Update Desired Projects inventory	14



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Contents

Change Documentation Page	3
Summary	5
Mission.....	6
Vision.....	6
Introduction	7
The Planning Process	7
Baseline Information:	8
Water Conservation Plans Assessment.....	8
Energy Assessment	8
Building and Energy Code Inventory as of June 2010.....	9
Guiding Principles	10
S.M.A.R.T. Goals	11
Key Concepts	14
Desired Projects Inventory	Error! Bookmark not defined.
Funding Mechanisms	15
<i>Appendix A: Advisory Board</i>	21



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Summary

The Resource and Energy Action Plan (REAP) consists of three phases. Phase 1 entails assessing energy use and community projects and developing the REAP Strategy, a guide to multi-jurisdictional energy action planning. It provides a framework to facilitate and streamline multi-sector collaboration in our region's efforts to effectively manage resources, potentially reduce energy costs, and meet energy and water usage reduction goals. Phase 2 adds Action Plan details to the REAP document. Phase 3 involves reassessing existing water conservation plans and energy and building codes that may result in modifications to proposed REAP Action Plans.

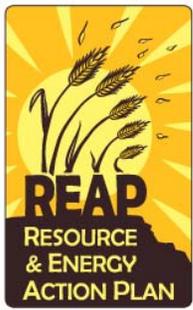
Our region encompasses Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties and the Southern Ute and Ute Mountain Ute Indian Reservations. This REAP Strategy draws upon leadership and expertise provided by a 65-member regional Advisory Board (see Appendix A). 4CORE thanks the Advisory Board members who have actively participated in this process.



The REAP Strategy adheres to the concept of the “Triple Bottom Line,” placing importance on “People, Planet, and Economy” aspects. The REAP Strategy document includes a mission statement, vision, guiding principles, goals, strategies and preliminary action plans for achieving the vision. Over time, more in depth action plans will be generated, using the guiding principles of the Strategy. None of these recommendations are binding and are only intended to guide the initial stages of development of resource-related programs and projects.

The content of the Strategy is informed by the findings of our region's REAP Community and Energy Assessments and ideas developed at meetings held throughout 2010 and early 2011. The Strategy identifies Guiding Principles and specific, measurable, agreed-upon, realistic, and timely (S.M.A.R.T.) goals that will enable REAP communities to reduce energy use, effectively integrate the existing energy industry, develop renewable energy resources and realize economic benefits. The Advisory Board prioritized these goals based on their feasibility and the associated benefits and opportunities for our region.

The Strategy is designed to initiate the successful development of REAP Action Plans and serve as a reference tool for our region's governments and stakeholders as they implement the REAP and develop resource-related programs and any community-supported policies. As technology and funding evolve, REAP Action Plans may be modified to reflect the priorities and capabilities of resource conservation opportunities in the region.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

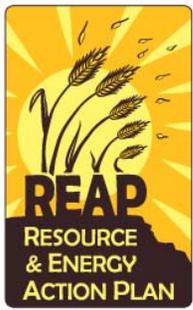
Single jurisdictions typically do not have the financial resources or population to leverage economies of scale. By developing partnerships and sharing resources, the communities of this region can continue to build capacity for the implementation of resource-efficient programs and projects.

Mission

Ensure Southwest Colorado uses resources and energy effectively and efficiently to create economic opportunities and improve quality of life by developing and implementing the Resource & Energy Action Plan.

Vision

Southwest Colorado will REAP the benefits of effective use of resources and sustain a thriving region of rural, agricultural, and mountainous communities.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Introduction

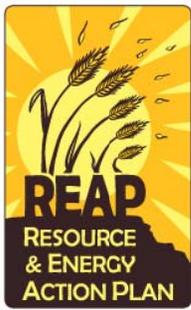
The Southwest Colorado region consists of Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties and the Southern Ute and Ute Mountain Ute Indian Reservations. The Colorado State Demographer's Office estimates the population at 92,277 in 2009. The major municipalities located in the region include the cities of Pagosa Springs, Durango, and Cortez, and the towns of Ignacio, Mancos, Bayfield, Silverton, Dolores, and Dove Creek.

The counties and municipalities that comprise this area consist of diverse economies, demographics, and environments. The region's electricity is provided by Empire Electric Association, La Plata Electric Association and San Miguel Power Association, all of which fall under the cooperative system overseen by Tri-State Generation and Transmission Association. Atmos Energy and Source Gas provide natural gas throughout the region. Approximately 11 privately owned companies supply propane to residents and businesses, and many of San Juan County's businesses and residents are heated by coal

The Planning Process

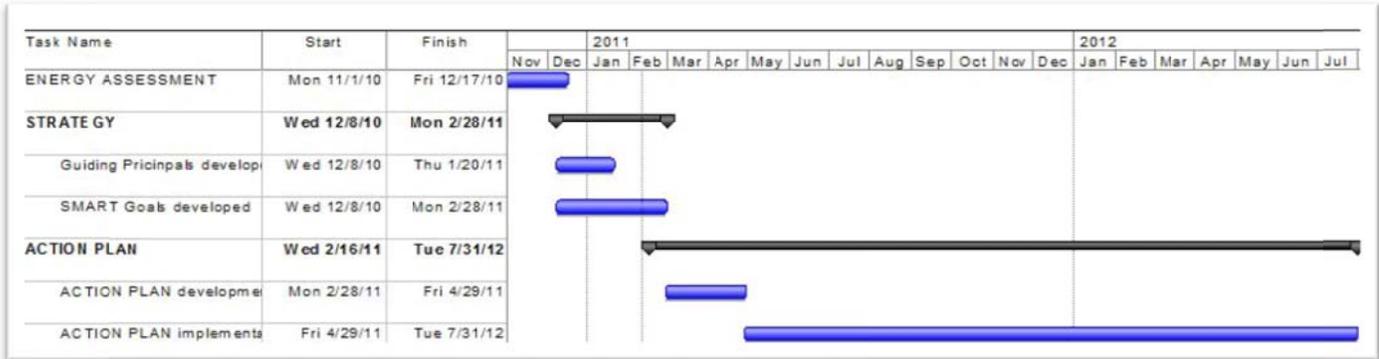
The planning process has occurred over the last nine months with Advisory Board direction and oversight provided through emails, phone calls, subgroup meetings, and three full group meetings (with webinar access provided to those who could not attend in person). Planning focused on assessing resources and potential projects through the development of the following:

- **Community Assessment**
 - Existing Projects Matrix
 - Current Initiatives
 - Future Projects Needs
 - Successes, Weaknesses, Opportunities, and Threats (SWOT) Analysis
 - Other regional meetings
- **Energy Assessment (by sector)**
 - Electricity
 - Natural Gas
 - Propane
- **Greening Government Inventory and Analysis**
 - Existing and potential Energy Performance Contract projects
 - Preferred Purchasing
 - High Performance Building
- **Development of the REAP Guiding Principles**



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

- Development of Specific, Measureable, Agreed-upon, Realistic, and Time/Fund-Constrained (S.M.A.R.T.) Goals
 - Prioritization of S.M.A.R.T. Goals
 - Initial list of action plans needed to achieve these goals



These documents can be downloaded at

<http://fourcore.org/EnergyActionPlans/ResourceEnergyActionPlan.aspx>

Baseline Information:

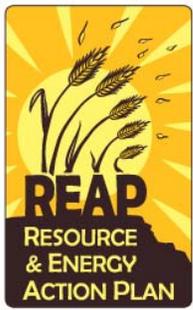
Water Conservation Plans Assessment

The following municipalities in Southwest Colorado have water conservation plans in place: Cortez (Ordinance#1143 Series 2010), Durango (Water Master Plan Update 1984), Ignacio (Water Conservation Ordinance 179, 7-11-00, Ordinance 258, November 14, 2007), and Pagosa Springs (Pagosa Area Water & Sanitation District water conservation plan, 2008). Of these plans, only Pagosa Springs has registered their plan with the Colorado Water Conservation Board.

4CORE will work with regional experts to develop a regional water use assessment in 2011.

Energy Assessment

Energy use data were gathered for residential, agricultural, commercial, and industrial sectors, as available. The report consists of research on energy use and costs in Southwest Colorado primarily for the year 2009. When 2009 data was unavailable, data from other years was used. Energy sources identified in the report include electricity, natural gas, propane, coal, geothermal, biomass and various renewable sources.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Electricity use in 2009 for the five-county region was estimated to be 1.68 billion kilowatt hours (kWh), costing \$146 million. This data was gathered from the electric co-op utilities serving the region, who are all members of [Tri-State Generation and Transmission Association](http://www.tristategt.org/) (<http://www.tristategt.org/>).

Renewable electricity production in 2009 was estimated to be 124 million kWh, with 26,153,000 kWh purchased from non-local sources. Sources of renewables include solar (ranging from grid-tied residential to large commercial arrays), micro-hydro, small wind, wind purchased from other regions, waste heat recovery and wastewater methane capture. This data was gathered where available, primarily from Empire Electric Association and La Plata Electric Association.

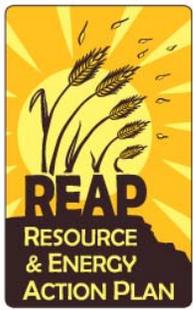
Natural gas use for the region was estimated to be 2,126,707 thousand cubic feet (MCF), costing \$12.3 million. This data was gathered from [Atmos Energy](http://www.atmosenergy.com/) (<http://www.atmosenergy.com/>) and [Source Gas](http://www.sourcegas.com/) (<http://www.sourcegas.com/>) the two natural gas companies serving the southwest Colorado region.

Propane use for the region was estimated to be 12.8 million, costing \$23 million. This data was gathered from individual propane companies serving the region. Some companies gave no data, and others used “ball park” estimates of the quantities sold in 2009. In addition, a \$1.80/gallon average price was used to calculate costs for all companies, based on pricing data gathered for 2009. For this reason, this data should be used with the knowledge that it is not comprehensive, nor exact in price.

Building and Energy Code Inventory as of June 2010

Building codes for Southwest Colorado range from land use codes only (that is, no adopted building codes) to the most current International Building Code (IBC) 2009, adopted by the city of Cortez.

Energy codes for the region range from International Energy Conservation Code (IECC) 2003 to 2009, with the city of Cortez implementing the most current IECC 2009 code. Several towns and some counties have not adopted energy codes (see the [New Energy Economy Community Assessment for Southwest Colorado](http://fourcore.org/docs/REAP/SWCO_Community_Assessment.pdf) at http://fourcore.org/docs/REAP/SWCO_Community_Assessment.pdf for details).



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Guiding Principles

Energy & Conservation:

Ensure significant progress toward more efficient, safe and healthy resource technologies in order to enhance, promote, and diversify the local economy and job market; support and strengthen the region's agriculture and building sectors; and engage and integrate the existing energy industry.

Economic Vitality & Diversity:

Encourage local economic development and consumption that preserves and protects our heritage, natural resources, agriculture and energy production, thus providing opportunities for our diverse population to thrive in Southwest Colorado.

Infrastructure:

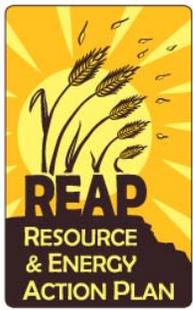
Improve, expand and diversify community systems and services, such as transportation, public utilities, and resource recovery options.

Vibrant & Involved Community:

Increase communication between all sectors and cultures throughout our region; promote education and involvement in existing and potential energy and economic opportunities.

Environmental Stewardship:

Protect, conserve, and ensure the quality of our ecological resources.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

S.M.A.R.T. Goals

The Advisory Board established S.M.A.R.T. Goals to help implement the REAP mission and achieve its vision. These goals are listed in order of prioritization. The group or individual responsible for each action is identified in parentheses after the action.

S.M.A.R.T Goal Priority #1: Create a prioritized list of recommendations to promote renewable energy (RE) development in conjunction with conventional energy in the five-county region for residential, commercial, industrial and municipal interests by June 30th, 2012.

Action Plan:

1. Design RE and conventional energy targets and measurable goals (SSTI work group facilitated by Optony). In progress.
2. Generate RE Feasibility Report to be shared at an EE/RE providers' guild meeting with a request for implementation support. (SSTI work group facilitated by Optony). In progress.
3. Create easy-to-use worksheet on cost/benefit analysis for conventional vs. alternative energy sources to include opportunity costs (4CORE). May 15, 2012
4. Implement Feasibility Report proposed actions for areas of growth and development in RE (to be identified in the RE Feasibility Report).

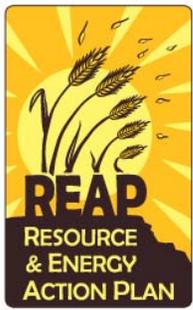
Complete:

1. Created a baseline analysis of current energy use and generation in the five Counties (Completed by 4CORE 12/17/10; available at <http://www.fourcore.org/energyactionplans.html>).
2. Developed a RE and conventional energy work group by, identifying the key people to collaborate and engage (Southwest Solar Technology Initiative meetings, April, 2012).

S.M.A.R.T Goal Priority #2: Assist building owners in recognizing energy efficiency (EE) improvements needed to reduce energy use in residential and commercial buildings by at least 10% in all five counties by 2012.

Action Plan:

1. Create incentives for EE by collaborating with local governments, local utility providers, and local banks (4CORE, Region 9 Economic Development Alliance, First National Bank of Durango, others). In Progress.
2. Increase regional collaboration for funding and education (4CORE). Track energy use changes using the baseline analysis of current energy use for the SW Colorado region (created in Goal #1) (4CORE). On-going.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

3. Provide technical assistance and data to those interested in making EE improvements, including information on all available incentives and a list of local providers for upgrades and improvements (4CORE). On-going.
4. Increase awareness of what is already happening: what is working and already being accomplished, taking advantage of momentum to drive initiatives forward (4CORE). On-going.

S.M.A.R.T Goal Priority #3: Beginning in 2013, 10% of homes sold per year will have energy audits; 5% of homes sold per year would implement recommended upgrades.

Action Plans:

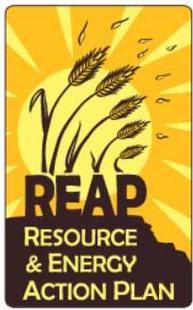
1. Educate realtors on the benefits of energy efficiency as a promotional tool for selling homes. On-going through the Sustainable Building Education Program.
2. Realtors promote home energy and water audits to both sellers and buyers and include financial incentives for EE and a list of local contractors to the homeowner and potential buyers. On-going, in partnership with area Realtor's Associations and Regional Housing Alliance.
3. Promote energy audits as a part of home inspection. On-going.
4. Work with utilities to improve incentives for energy audits (see S.M.A.R.T. Goal #2, first bullet).

S.M.A.R.T. Goal Priority #4: Increase community awareness (10% of the population per year beginning in 2012) of the importance and benefits of existing and future resource and energy conservation mechanisms, EE/RE ideas, models, and available services. Emphasize collaboration between all sectors.

Action Plans:

1. Reach out to all sector representatives; (1) identify the best way to dialogue with specific sectors and (2) determine the lead time needed by interviewing advisory board members (4CORE). On-going.
2. Increase public awareness of the REAP as measured by outreach metrics (press pick-up, radio ads, website visits, social media, etc.) in order to create a credible Resource & Energy Action Plan (4CORE). On-going.
 - a) Identify and engage public, private, non-profit and community experts to assist with specific marketing materials, in addition to participating advisory board members (4CORE).
3. Initiate a REAP Outreach Campaign (4CORE)

Complete:



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

4. Create a REAP Outreach Plan, complete with the cost of disseminating information to each sector (4CORE), including the following:
 - a) Specific marketing material (unique language and messaging) for each sector (4CORE). Sectors include:
 - Agriculture
 - Oil & Gas
 - Home Owners
 - Renewable Energy Suppliers/Installers
 - Children and Students (“next generation”)
 - Transportation
 - Business
 - Public Lands
 - Construction
 - Health Industry

The REAP Outreach Plan can be found here:

http://fourcore.org/Portals/0/Documents/REAP/Products/REAP_Outreach%20Plan_final.pdf

S.M.A.R.T Goal Priority #5: Work with the Transit Coordinating Council and the existing Southwest Colorado Regional Transit Feasibility Study to implement action items which increase the availability and usage of mass transit in our region.

Action Plans:

1. Work to build capacity of regional transit providers and increase available transit options (Transit Coordinating Council). On-going.
2. Engage the private sector through education to get buy-in and document buy-in by requesting and filing letters of support for increased availability of public transit (REAP work group and 4CORE).

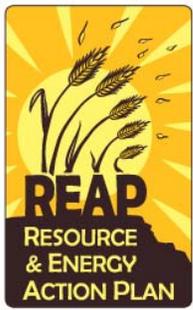
Complete:

1. Identify experts, inhibitors, assets, influencers (Transit Coordinating Council). On-going.
2. Analyze the successes and failures of transit plans from other areas to increase the effectiveness of implementation (Transit Coordinating Council). On-going.

S.M.A.R.T Goal Priority #6: Foster the development of a regional resource recovery system by 2015.

Action Plans:

1. Hold a Regional Recycling Roundtable to bring recycling providers together to discuss potential opportunities for collaboration and ways to



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

- increase economies of scale. On-hold based on feedback from community (4CORE).
2. Complete a feasibility study for a new regional recycling facility. Dependent on receiving grant funds (Phoenix Recycling, LLC and 4CORE).
 3. Conduct community workshops on how to be creative with waste and help create new jobs (compost, mulch, recycled glass products, furniture repair, art, etc.) (4CORE and Fort Lewis College Environmental Center). On-going.
 4. Encourage the creation of incentives through collaborating with local governments and industry (Work with S.M.A.R.T. Goal #2, first bullet). On-going.

S.M.A.R.T Goal Priority #7: Incentivize RE and EE in new building construction by working with the city/county building departments in all five counties to encourage a reduction in RE and EE building permit costs by October 2012.

Action Plans:

1. Identify current permits required, costs and process (SSTI). In-progress.
2. Attend town/city/county work sessions to determine how to reduce building permit costs for construction that utilizes EE and RE (SSTI). In-progress.

S.M.A.R.T Goal Priority #8: Develop a collaborative mechanism for working with public lands sectors and management by April 30, 2012 in order to accomplish REAP goals.*

*Not yet initiated, and though this goal and actions were developed by the REAP Advisory Group, this task has not risen to the top as a priority.

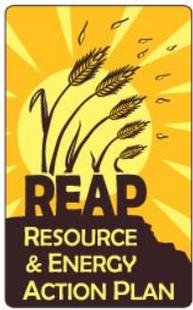
Action Plan:

1. Explore and develop an MOU (Jennifer Stark).
2. Identify, engage, and bring public lands representatives from the Bureau of Land Management, state lands, water districts, etc. to the advisory board (4CORE).

Key Concepts

During the development of the S.M.A.R.T Goals and Guiding Principles outlined above, the concept of the Triple Bottom Line "People, Planet, Economy" was used and the following areas surfaced as important concepts in our region:

- Economic Development
- Energy Efficiency
- Renewable Energy
- Built Environment- New and Existing Buildings



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

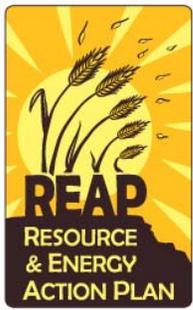
- Public Lands and Natural Resources
- Oil and Gas Industry
- Local Government
- Cultural Heritage
- Transportation
- Waste and Material Conservation
- Community Education and Buy-In

Desired Projects Inventory

Note: This list is intended to be a dynamic working part of this document and will be updated as necessary. The projects outlined below align with the afore-mentioned Guiding Principles and S.M.A.R.T. Goals. The projects status are being tracked by an assigned 4CORE Community Energy Coordinator (CEC). The 4CORE CECs share potential resources and funding sources with project contacts to help facilitate project implementation.

Archuleta County

1. The town of Pagosa Springs is developing a business plan and request for bids for geothermal upgrades to their existing system. The goal is to update technologies to make the existing geothermal source as efficient as possible, with the potential result of heating more businesses and homes without affecting the flow or pressure to those currently using the geothermal source. The end result of this project could potentially establish a new geothermal utility for the town.
2. The town of Pagosa Springs is working to fund the installation of a community geothermal greenhouse to showcase the potential for geothermal development.
3. The town of Pagosa Springs is working to fund the installation of solar panels to power their geothermal pump house (in conjunction with item 1).
4. The Pagosa Springs Area Water and Sanitation District (PAWSD) is exploring the integration of renewables in order to power their facilities.
5. The town of Pagosa Springs and PAWSD are working to create a solar biosolids processing facility.
6. The Archuleta school district is working on a potential energy performance contract for existing facilities, as well as building new shared municipal facilities with a recreation center and ball fields. Ideas for this property also include an educational aquaculture facility and/or an educational greenhouse to serve the joint purpose of educating high school students and generating revenue.
7. A local resident is working on developing a solar array for the Pagosa area with energy storage capability for peak hour use. This new technology is for solar panels that can



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

retain heat energy at night and store it for use on demand. The coordinator is looking for grants for land and panels.

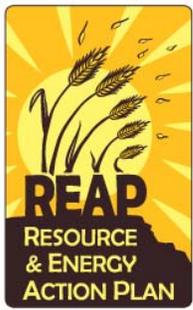
8. Archuleta County would like to conduct proactive training for local contractors in new code implementation.
9. Archuleta County would like to expand their transfer station and add a materials recovery center and a second-hand mercantile.
10. The Pagosa Springs Youth Center would like to weatherize their building and update their existing heating and lighting systems.
11. The Southwest Organization for Sustainability in Archuleta County would like to hire a part-time coordinator.
12. J.R. Ford, a private business owner, is developing a source for woodchip biomass fuel in collaboration with the forest service, near Pagosa Springs.

Dolores County

1. The School of Mines did a geothermal study in Rico in 2010/2011, finding high potential for geothermal applications, but recommending further analysis. Students will be back summer of 2012 to complete the study.
2. The Dove Creek Community Health Clinic is looking into solar thermal and solar PV applications.
3. Dolores County and the Town of Rico's Town Hall are both in need of energy assessments and upgrades. An energy assessment will be incorporated into an educational energy conservation presentation at the Rico Town Hall.

La Plata County

1. Phoenix Recycling, LLC and business partners are working to develop a regional Resource Recovery Park. This park would create new jobs and markets for recycled materials, increase the diversion of recycled materials from landfills and prevent greenhouse gas emissions.
2. A local realtor is planning to conduct training on new green fields and features in the MLS (Multiple List System). These features became active in our region in February 2011.
3. The GEO is working with 4CORE, Colorado Real Estate Network (CREN), and builders, energy raters and realtors in La Plata County to study the impact of ENERGY STAR New Homes (ESNH). The goal is to provide evidence for builders that ESNH has provided value in the home buying process.
4. KSUT is planning to move into a 5,000 square foot warehouse that is essentially a blank slate. They would like to build new studios that are both state-of-the-art and energy efficient, so are looking for funds to "green" the new building.

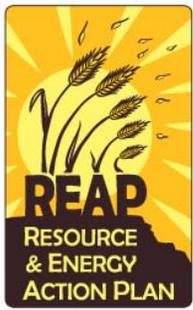


Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

5. A group in Bayfield is looking to develop a Transition Town. The Transition Movement is a grassroots movement that seeks to build community resilience in the face of such challenges as peak oil, climate change and the economic crisis.
6. Animas High School is looking to move to a new location and would like to make their new building as “green” as possible.
7. Heartwood Farms in Bayfield is looking to develop a solar garden, but need funding and the availability of net metering.
8. La Plata Electric Association is looking for seed money to develop a community solar garden.
9. La Plata Electric Association offers customers free electricity audits, and would like to develop a rebate program to encourage businesses to pursue energy efficiency retrofits recommended by the audit.
10. Healthy Community Food Systems is interested in developing designs and demonstration projects for three areas of energy efficiency in food and agriculture: 1) Innovative resource-efficient livestock watering freeze protection for small numbers of livestock, 2) Life-cycle-resource-efficient cool food storage for homes ranging from cold cellars to smart cool compartments, and 3) Solar food dehydrators with truly non-toxic materials and provisions for food safety.
11. The Smart Energy Committee would like to see local, distributed, renewable electrical generation in La Plata County.
12. The Sustainability Alliance of Southwest Colorado is pushing the City of Durango to consider banning single-use plastic bags.
13. Local First is looking at how they can influence or create policy that insures sustainable development. Specifically, they would like to push regulations that ensure the upcoming retail build in Grandview utilizes renewable energy, has minimal environmental impact, employs local contractors, incorporates green space and alternative transportation, etc.
14. To use lighting more efficiently, the Commons Building in Durango would like to retrofit parking lot lighting, install motion sensors in bathrooms and closets, and install dimmers in the conference room.

Montezuma County

1. RED Wagon Energy completed a grid tied, 88 kW solar system in Mancos with hopes to build more through a solar garden approach.
2. RE-1 school district in Montezuma County is applying for a BEST Grant.
3. RE-1 School district is working with an Energy Services Company, McKinstry, to conduct energy performance contracting services on many of the counties schools, as well as develop an educational curriculum for students and teachers.
4. Dolores schools are applying for a BEST Grant.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

5. Empire Electric is getting ready to expand their solar garden, adding an additional 5kW to their existing 5kW. They have room for a third addition of 5 more kW.
6. Renew, Inc. is looking into a commercial energy audit.
7. The town of Mancos is working with the Governor's Energy Office to evaluate 2 of their municipal buildings for energy use and upgrades.
8. Baker Sanitation would like to expand their recycling services. They currently collect cardboard, metal, and paper due to an RREO (2011) grant and will need more money and customer support in order to expand.
9. The City of Cortez was awarded a Heart and Soul grant to improve their comprehensive plan and land use plan through community involvement. They will be applying for other grants to help facilitate this process.
10. Southwest Colorado Community College is interested in collecting recyclable electronics from students and the public.

San Juan County

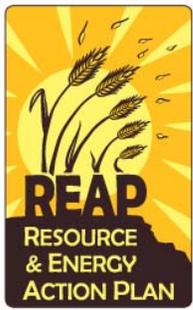
1. Silverton Chamber of Commerce and Youth Center are seeking funds for insulation and air sealing of the Historic Building in Silverton known as "The Visitors Center."
2. The Town of Silverton and San Juan County are using the Energy Management and Assistance Program in conjunction with Trident Energy and the Governor's Energy Office to improve the energy efficiency of their municipal buildings.
3. Kurt Johnson with Telluride Energy is working with Silverton on a small 9 kW micro hydro system.
4. Silverton is working on a downtown revitalization project, including changing out street lights for more efficient, yet historically-relevant, lights.

Multi-County Projects

1. Local electric utilities would like to conduct a CFL buy-down. (LPEA & San Miguel Power)
2. Employ technologies that pre-treat, filter, and temporarily detain stormwater in municipal, commercial, and residential projects in order to remove pollutants and

restore pre-development hydrologic patterns to urbanized watersheds as pollution and water supply sustainability measures.

3. RainHarvest Solutions offers the TreePod biofilter, which captures municipal stormwater, providing large debris/garbage filtration and biofiltration of nutrients and other stormwater related pollutants. Collected flows may be utilized to supplement irrigation of the TreePod and surrounding vegetation, reducing demands on local water supplies. Any infrastructure upgrade project would be an opportunity to explore innovative solutions to stormwater management and water conservation.



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

4. RainHarvest Solutions offers the CUDO stormwater management system which provides underground stormwater detention, filtration of municipal snow stockpile effluent water, and many other water quality and water supply applications that require modular water storage, infiltration, and filtration services to enhance water quality and water supply sustainability.

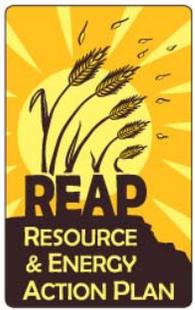
Completed Projects since January 1, 2011:

- √ The West Building in Durango was retrofitted with efficient lighting.
- √ The Town of Ignacio converted their street lights to LED using fixtures that match current lights. The Durango Discovery Museum has insulated and sealed the museum building and installed solar PV, solar thermal, and geothermal. They also participated in regional energy efficiency and renewable energy assessments and planning for sustainable community and building design. This will be integrated into the museum building/exhibits.
- √ The historic Smiley Building has insulated their attic.
- √ Empire Electric Association (EEA) installed a 5 kw solar garden (24 panels) for customers who want to support RE.

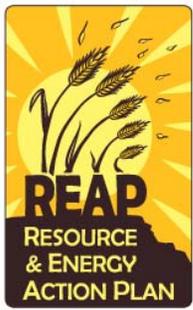
Funding Mechanisms

The S.M.A.R.T. Goal tasks and projects outlined above will be funded through a variety of methods. For instance, action plans implemented by 4CORE staff members may be funded through grants and partner contributions. Other projects, such as the efforts associated with expanding transportation in the region, are being funded by collaborative grants.

Many of these endeavors are not yet funded and creative means will need to be used to accomplish these goals. It is anticipated that the Pagosa Springs Geothermal upgrades will be funded by a combination of private investments, public grants, and utility rebate programs. J.R. Ford's biomass project may be funded by private investors if LPEA provides a long-term Power Purchase Agreement (PPA). As mentioned above, CECs are continually monitoring grant funding and notifying potential applicants.



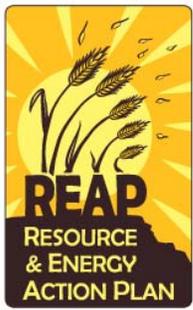
Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

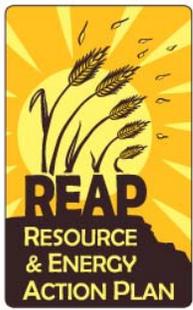
Appendix A: Advisory Board

Name		County	Organization/ Expert Area
Laura	Lewis Marchino	All	Region 9 Economic Development District (EDD)
Ed	Morlan	All	Region 9 EDD
Denise	Rue-Pastin	All	Southwest Water Conservation District (SWCD); Southwest Organization for Sustainability (SOS)
Jimbo	Buickerood	All	San Juan Citizens Alliance (SJCA)
Bruce	Baizel	All	EARTHWORKS
Chloe	Wiebe	All	Workforce Development
Jennifer	Stark	All	Higher Education, Community Learning & Research, Fort Lewis College, Rico Planning Commission
Bob	Bragg	All	Higher Education, Southwest Colorado Community College (Mancos, Durango)
Julie	Simmons	Multiple Counties (La Plata, Archuleta, Montezuma, San Juan)	Colorado Housing, Inc.
Barbara	Jefferies	Multiple Counties: La Plata, Archuleta	La Plata-Archuleta Cattleman's Association
Wayne	Semler	Multiple Counties: La Plata, Archuleta	La Plata-Archuleta Cattleman's Association
Kyle	Beebe	Multiple Counties: La Plata, Archuleta	La Plata-Archuleta Cattleman's Association
Jake	Nossaman	Multiple Counties: La Plata, Archuleta	La Plata-Archuleta Cattleman's Association



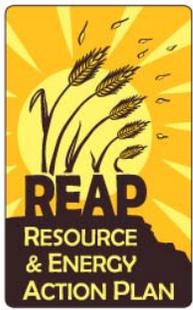
Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Name		County	Organization/ Expert Area
Tom	Talley	Multiple Counties: La Plata, Archuleta	Woolgrowers Assoc. and Farm Bureau
Jeff	Berman	Multiple Counties: La Plata, Archuleta	La Plata Electric Association
Pam	Patton	Multiple Counties: La Plata, Archuleta	La Plata Electric Association
Jeff	Engman	Multiple Counties: La Plata, Montezuma	ConocoPhillips
Brad	Broyles	Multiple Counties: All but San Juan (note: no bank in San Juan)	First Southwest Bank
Bill	Green	Multiple Counties: Dolores (Rico), San Juan (Silverton)	San Miguel Power Association, Inc.
Bob	Clayton	Multiple Counties: La Plata, Montezuma	Kinder Morgan
Jerry	Fetterman	Multiple Counties: Montezuma, Dolores	Empire Electric Association
Doug	Sparks	Multiple Counties: Montezuma, Dolores	Empire Electric Association
Michael	Whiting	Archuleta	Southwest Land Alliance, Archuleta County Commissioner Candidate
Clifford	Lucero	Archuleta	County Commissioner



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Name		County	Organization/ Expert Area
Ross	Aragon	Archuleta	Mayor of Pagosa Springs
James	Dickhoff	Archuleta	Staff: Pagosa Springs
Mat	deGraaf	Archuleta	Pagosa Area Water and Sanitation District
J.R.	Ford	Archuleta	Biomass electrical generation plant
Julie	Kibel	Dolores	Elected Official
Barbara	Betts	Dolores	Rico Elected Official
Becky	Levy	Dolores	Rico Elected Official
Christina	Thompson	La Plata	Durango Elected official, LEAD: La Plata Economic Development Action Partnership
Jeanine	Justice	La Plata	Healthy Lifestyles La Plata
Peter	Diethrich	La Plata	Southern Ute Indian Tribe
Terry	Fitzgerald	La Plata	Agriculture affiliate
Heather	Erb	La Plata	Real Estate
Greg	Fryback	La Plata	Real Estate
Terry	Woodward	La Plata	SME: People-Planet-Profit
Tyler	Scheid	La Plata	SME: Water shed
Werner	Heiber	La Plata	Sustainability Alliance of Southwest Colorado (SASCO)
Paul	Senecal	La Plata	town of Ignacio
Jodi	Foran	Montezuma	Montezuma Climate Action Network, SW Memorial Hospital Board and NEEP team



Resource and Energy Action Plan (REAP) Strategy: A Guide for Action Plan Creation

Name		County	Organization/ Expert Area
Matt	Keefauver	Montezuma	Cortez Elected Official
J	Felton	Montezuma	Bill Barrett Corp.
Jim	Foster	Montezuma	Bill Barrett Corp.
Scott	Clow	Montezuma	Ute Mountain Ute Tribe
Tomoe	Natori	Montezuma	Ute Mountain Ute Tribe
Chris	Barber	Montezuma	Dolores Elected Official
John "Jack"	Schuenemeyer	Montezuma	Chamber of Commerce Also: SME: statistics consulting firm and author, Let It Grow Nursery owner
Gretchen	Fitzgerald	Montezuma	USDA, San Juan National Forest
Mitchell	Toms	Montezuma	Economic Development Association
Trevor	Lytle	Montezuma	Home Builders Association
William	Tookey	San Juan	County Staff
Dave	Zanoni	San Juan	Silverton Elected Official
Jason	Wells	San Juan	town of Silverton staff
Kimberly	Buck	San Juan	San Juan Development Association