



# colorado mountain college

2012 Climate Action Plan



Dr. Stan Jensen, signing the Presidents' Climate Commitment, September 2009

Dear AASHE/STARS Steering Committee:

As president of Colorado Mountain College I support practical sustainability to meet the challenges of our changing world. On September 25, 2009 I signed the American College and University President's Climate Commitment. So far, \$3.6 million dollars have been invested in our commitment to sustainability.

Colorado Mountain College has retrofitted its buildings with more energy efficient lighting, occupancy sensors, condensing boilers, gas and electric live energy monitoring meters, solar domestic hot water, and windows, among a host of other efficiencies. One of our goals was to achieve 15% of our electrical energy usage from alternative sources. So far, as a result of these improvements and the building of two solar farms on two of our campuses we have realized 12% towards this goal by using these strategies.

One of the first 2 bachelor's degrees offered at Colorado Mountain College was a Bachelor of Arts in Sustainability studies. As evidenced by the 2012 Climate Action Plan, we as a college are committed to sustainability and to reducing our carbon footprint for the long term.

Sincerely,

Stan Jensen, Ph.D.  
President, Colorado Mountain College

## Table of Contents

Executive Summary	Page 4
Background Information	Page 6
Focus Areas:	
• Energy Efficiency	Page 10
• Renewable Energy	Page 13
• Transportation	Page 15
• Solid Waste Reduction	Page 17
• Purchasing & Procurements	Page 18
• Land Use & Grounds Management	Page 20
• Education	Page 20
Financing the Climate Action Plan	Page 22
Tracking Progress and Next Steps	Page 23
Conclusion	Page 23
Appendix	Page 24



CMC Faculty/Students Monitor Water Quality in Local Streams

## Executive Summary:

Colorado Mountain College (CMC) is a 2 year community college located in the north-central Rocky Mountain region of Colorado. Our mission statement is “To create a better future for our students, employees, and communities”. The signing of the American College and University Presidents’ Climate Commitment (ACUPCC) even further supports our mission by the creation of a Climate Action Plan (CAP) focused on becoming carbon neutral and developing a greater culture of sustainability for the future of all.

The CMC district covers over 12,000 square miles of beautiful mountain scenery which includes homestead ranches, wilderness, Victorian boomtowns, mining, oil and gas production, and the cultural atmosphere that has grown alongside world renowned ski resorts. The college is made up of 12 teaching locations spread throughout the region. There are 3 residential sites located in Steamboat Springs, Leadville and Spring Valley located outside of Glenwood Springs. Students attending residential sites are more traditional in age and are enrolled in full-time degree and certificate programs. Also, the college has 8 commuter sites located in Rifle, Aspen, Glenwood Springs, Carbondale, Edwards, Dillon, Breckenridge, and Chaffee County. The commuter sites serve our local community members taking courses on a part-time basis to fulfill degree and/or certificate programs, industry training, workforce development and lifelong learning. Our 12<sup>th</sup> location is in the virtual world, offering students courses through the web and our interactive video system.



Our enrollment of 24,000 students annually is represented with learners from all over the United States, as well as internationally. However, the majority of our students are from our local CMC communities. Many of our students enroll in programs such as Culinary Arts, Nursing, Ski and Snowboard Business, Integrated Energy Technology, Natural Resource Management, Veterinary Technology, Photography, Outdoor Education, Fire Science Technology, Emergency Medical Technician Paramedic, Ski Area Operations, and an Associate of

Arts and/or Science. Recently, we were approved by our accrediting agency the Higher Learning Commission to offer 2 Bachelor degree programs in “Sustainability” and “Business”. These 2 new Bachelor programs have completed their first year of enrollment and have been embraced enthusiastically by our students and community members.

The vision for sustainability is to establish a collegewide culture of sustainability and to foster a resilient future by leading CMC towards fulfilling the goals required by the [American College and University Presidents’ Climate Commitment](#). The college’s efforts are aimed at:

- Reducing the college’s carbon emissions and environmental impacts.
- Developing collegewide sustainability operations and programs that address the environment, the economy and social responsibility.
- Supporting education for sustainability.

This document outlines the initial strategic efforts CMC will take towards carbon neutrality. The key interim target is to reduce the college’s Greenhouse Gas Emissions (GHG), in five year increments, by 12.5%. This percentage is set from the 2010 baseline GHG report. The predicted annual growth rate for the college is estimated to be three percent. Therefore, as the college grows it will need to monitor and adjust the current established CAP goals to reflect the increases in student enrollment, expansion of new facilities, renovations of current facilities, transportation, and travel.

Achieving carbon neutrality will take a coordinated collaborative effort by every student, staff and faculty member at CMC. Since each CMC campus fluctuates in physical size, student enrollment and resource access and allocation, it would be beneficial for staff working on this required sustainability initiative to produce individual greenhouse gas inventory reports for each campus. These individual campus reports will supply campus leaders with the data they need to strategically set reduction targets that specifically focus on their campus GHG data and utilize their specific campus and community resources to successfully meet reduction targets until carbon neutrality is met at their campus. Some campuses will have similar emission areas to address, such as transportation. It will be up to the sustainability staff to help coordinate programming between campuses so that resources and best practices may be shared. Sustainability staff will be responsible for communicating with the campuses to gather and track all collegewide data as it pertains to the CAP report.

As each campus works toward reducing its carbon emissions they will also be working towards the college wide goal of carbon neutrality. It will be through this collaborative effort, CMC will be able to achieve, not only carbon neutrality, but a greater culture of sustainability.

## Background Information:

### American College and University Presidents' Climate Commitment (ACUPCC):

On September 25, 2009, Dr. Stan Jensen, President of CMC signed the American College & University Presidents' Climate Commitment (ACUPCC) at a signing ceremony in Breckenridge, Colorado. The ceremony had over 500 people in attendance including students, faculty, staff, community members and political leaders. Their attendance demonstrated a collective commitment in support of the Presidents' Climate Commitment. This commitment required CMC to develop a CAP to reduce its GHG emissions and inspire change. The CAP plan will utilize the GHG emissions data to establish a series of reduction goals, target dates and operational strategies which will guide the college towards carbon neutrality by 2050. However, to achieve long-term success the college leadership team will need to drive momentum by integrating the CAP overarching goals into the college's strategic plans and policies. Each step must benefit the triple bottom line and keep the bigger picture in mind, of establishing a culture of sustainability at CMC by becoming as carbon neutral as possible. Below is the ACUPCC list of requirements and the actions that CMC has already taken to meet those requirements:

#### 1. Establishing an institutional structure to oversee the development and implementation of the schools' program to comply with the ACUPCC;

- Institutional Infrastructure:
  - Campus Green Teams
  - Strategic Plan Development:
    - College wide Strategic plan
    - Sustainability-focused strategic plan (attached)
  - College wide Green Survey 2009, 2011 (attached)
  - Sustainability AQIP report in FY2009 (attached)
- Policy & Procedures:
  - Greenhouse gas emissions inventory FY 2009-2010 (attached)
  - Building Design Standards Policy (attached)
  - College Energy Policy (attached)
  - Human Resources Employee Benefits:
    - Employee Telecommuting Options
    - Public Transportation Benefits

## 2. Staff Volunteer Hours

### **Completing an emissions inventory within one year;**

- GHG Inventory baseline report completed in 2010.
- Follow up reporting will take place in 2012, 2014, 2016, etc.

## 3. Taking immediate steps to reduce greenhouse gas emissions by implementing at least two of a list of seven tangible actions while the climate action plan is being developed;

- The CMC *Building Design Standards Policy* states that all new campus construction will be built to at least the U.S. Green Building Council's LEED Silver standard or equivalent.
- The college has begun working towards "purchasing or producing at least 15% of our institution's electricity consumption from renewable sources" by using solar PV and ground source heat pumps systems.
- In 2011 two CMC campuses volunteered to participate in the Waste Minimization component of the national RecycleMania competition.

## 4. Integrating sustainability into the curriculum and making it a part of the educational experience;

- [Approved Bachelors of Arts in Sustainability Studies 2011](#)
  - [CTE degrees and certifications focused on green jobs](#)
  - [Sustainability infused into Student Learning Outcomes](#)
  - Faculty professional development workshops to integrate sustainability into their curriculum.
  - Co-curricular educational programs such as the Common Reader series ("Plenty" by Smith and Mackinnon), Cafeteria composting, Recyclemania program, "Move Out" resident hall recycle/reuse program, public energy use dashboards, local food procurements, recycling, etc.
- ## 5. Making their greenhouse gas inventory, climate action plan, and progress reports publicly available.
- Available on CMC sustainability webpages and ACUPCC reporting webpage [www.coloradomtn.edu/sustainability](http://www.coloradomtn.edu/sustainability)

## 2010 Greenhouse Gas Inventory Baseline Report:

The ACUPCC commitment requires that the college conduct a GHG emissions inventory within the first year of becoming a signatory. The purpose of this initial GHG inventory for fiscal year 2009-2010 (FY10) was to establish a baseline measurement of all GHG emission generated college wide. The information contained in this report will be used to guide future reduction goals developed in the College's Climate Action Plan (CAP).

Emissions are organized into 3 "Scopes" as defined by Climate Change Committee (CCC) specifications. The Scopes are described as follows:

**Scope 1 – Direct Emissions** measures all direct emission sources that are owned and completely controlled by the institution such as co-generation sources, campus fleet vehicle miles, refrigerants, fertilizer, and agricultural sources.

**Scope 2 – Indirect Emissions** measures all indirect emission sources that are not owned or operated by the institution but are directly linked to on-campus energy consumption such as purchased energy.

**Scope 3 - Other emissions** measured are those that are attributed to your institution such as solid waste generation, commuter miles and subsidized travel.

The emission totals are presented in Metric Ton CO<sub>2</sub> Equivalent (MteCO<sub>2</sub>). MteCO<sub>2</sub> is the standard measurement of the amount of CO<sub>2</sub> emissions that are reduced or sequestered from our environment. Table 1 describes the amount of emissions by scope.

**Figure 1. CMC Emission and Energy Use**

Scope (Emission Type)	Emissions (MteCO <sub>2</sub> )
Scope 1 (Direct)	2684.7
Scope 2 (Indirect)	4015.9
Scope 3 (Other)	6961.0
<b>NET TOTAL =</b>	<b>13, 662.3</b>

GHG emissions (by source) are described in Figure 1. Directly financed air travel is the largest source of GHGs at 44 %. Purchased electricity is the second largest emission source at 27%. The third largest emissions source is "on-campus stationary source" that includes natural gas at 14%. Commuter travel data was excluded from Scope 3 due to the lack of availability of sufficient commuting data for the 2009-2010 fiscal years. A method for capturing this data in the future is currently being developed.



## Summary

- (1) CMC has developed a process for gathering emissions data, identified areas of data tracking that require development or modification, established a baseline of emissions data, and identified areas that generate high levels of greenhouse gas emission.
- (2) The results of this report will be analyzed and utilized to develop the College's climate action plan (CAP). This baseline data will also function as a benchmarking tool to measure the College's progress for their future GHG emission inventory reports.
- (3) The process of collecting data for this report revealed particular areas within each Scope in which CMC either does not collect data or the data units differed (monetary unit vs. mileage units) from CCC input parameters. By clarifying the required data categories and data units needed to complete the greenhouse gas inventory, then CMC can begin developing more efficient emission data tracking methods for future reports.
- (4) Estimated annual growth for the college is 3 percent. This growth rate will need to be taken into account when calculating future GHG reports.
- (5) The greenhouse gas emissions inventory will be prepared every two years and submitted on even years (2012, 2014, etc.). Future greenhouse gas emissions data will be used as a tracking method to measure the progress of the College's emission reduction goals set in the climate action plan.
- (6) ACUPCC reports can be found at: <http://rs.acupcc.org/>

### Process for Reporting and Updating the CAP report:

Reaching carbon neutrality by 2050 is long-term goal for CMC. The college will need to establish short-term targets and benchmark goals which must be examined and reviewed on a regular basis to determine if we are reaching the goal of carbon neutrality. This review will be conducted every two years after the completion of the GHG reporting cycle. In order for the College to successfully make progressive steps towards carbon neutrality a CAP advisory committee will need to examine all CAP data and update target goals, operational strategies, educational programming and financial and technological options. It is recommended that every five years this committee convenes to formally evaluate the progress (or lack of progress) made and prepare a public progress report for the CMC campus community. Communicating clearly the successes and areas to work on throughout this process will be a key element for long-term participation.

## Focus Areas:

### Energy Efficiency

Before investing in expensive new LEED-certified construction, energy conservation measures or renewable energy systems the college needs to first examine its energy usage and look for ways to reduce its overall energy consumption. In 2009 CMC entered into a performance contract with an energy service company (ESCO) to conduct energy, water and lighting audits on all college-owned facilities. In 2010 the final technical energy audit report was completed. It uncovered many areas of inefficiency and infrastructure concerns such as:

- Aging and/or inefficient heating and cooling equipment
- Mixture of new and outdated inefficient lighting
- Old inefficient windows
- High water usage
- No scheduling or night setbacks in many buildings
- Residence halls that consume large amounts of natural gas for domestic hot water heating

From the audit data, energy conservation measures (ECM) were suggested to reduce utility costs, operational costs, capital equipment replacement needs and to modernize the infrastructure of facilities. Some of the ECM projects implemented were:

- Lighting Retrofits (interior and exterior)
- Occupancy sensors
- High efficiency condensing boilers
- Gas and electric live energy monitoring meters
- De-stratification fans
- Point of use hot water heaters
- Replace windows
- Retro commissioning of mechanical systems
- Solar domestic hot water
- Retro-fit of water fixtures for water conservation
- ENERGY STAR rated roof
- College wide Energy Policy developed



Rifle Campus Students Install Solar Panels on the New Castle Library, Garfield County

Investing in these projects will provide the following benefits:

- New, modern and energy efficient HVAC systems
- Improved lighting quality and efficiency
- Improved occupant comfort
- Energy metering systems for all buildings
- Live energy monitoring system
- Use of renewable energy sources
- Reduced water consumption

All projects will be financed through capital provided by the College. After an investment of \$3,584,395 the first year savings total will be \$473,273. An expected annual utility cost saving of over \$96,843 equates to approximately a 15% reduction in utility costs annually.

CMC has an expected annual growth rate of 3%. It can be difficult to stay on track with reduction targets when new emission sources are being added annually. However, CMC has developed two college wide policies to support the implementation ECM and building design standards to help counterbalance potential growth on campus. The Facilities Department generated the *Building Design Standards Policy* in 2010. This policy incorporates LEED Silver standard or equivalent into new facility construction and also “*incorporate as many ENERGY STAR rated products so that the college can save in operating expenses, save energy and prevent carbon emissions*” into all remodels and building additions. **(Appendix A)** In 2011 a college wide *Sustainable Energy Conservation Policy* was approved. This policy “*is expected to reduce energy consumption, and optimize utility and operation cost savings with minimal additional capital investment while providing a framework that supports sustainability.*” **(Appendix B)**

Another opportunity to focus on energy conservation is through the Information Technology (IT) department. As the college plans to further develop its virtual campus and to become more dependent upon technology energy conservation efforts and behavior norms should be a part of the strategic plan. The IT department is already conscious of their energy impact and has implemented the follow ECM strategies that are listed in the *Sustainable Energy Conservation Policy: Section 3.02*:

#### **Computers and Other Electronics:**

Faculty and staff are to adjust power settings on computers and other electronic office equipment to maximize energy savings. For detailed instructions on how to activate power settings on your computer please contact the IT service desk. Standard power settings for computers:

- CPUs set to enter systems stand-by mode after 15 minutes of inactivity.
  - Monitors and systems are to enter hibernate mode after 60 minutes of inactivity.
  - Exceptions to this policy are servers and infrastructure devices plus other monitored devices identified by IT to be necessary and running at all times.
- Utilizes a remote server system to store files.

### Efficiency Plan:

1. Develop accurate database of utility data and establish a consistent energy tracking process to monitor data throughout the CMC district.
2. Raise awareness about energy consumption on campus by installing energy dashboards (Energy Navigator) in all buildings to share real-time energy data. Providing real-time energy data will be instrumental to students, staff and faculty in promoting energy smart behavior changes. This will also provide excellent place-based learning opportunities.
3. Each campus will be responsible for and/or be provided by the Facilities staff the tracking utility and billing data so that they are aware of their consumption levels, their peak hours of use and financial costs. Encouraging each campus to assess their energy consumption levels, to focus on their “energy hog(s)” buildings and to work with Facilities and Sustainability staff to design energy conservation programs will encourage energy conservation, reduce carbon emissions and enhance energy awareness.
4. Look for ways to utilize the building more efficiently. (I.e. schedule classes in blocks to utilize HVAC zoning, schedule class during off-peak hours, schedule HVAC systems to shut down if rooms/zones are not in use.)
5. Amend the purchasing of ENERGY STAR products, when feasible, into the *Sustainable Energy Conservation Policy* to further support energy efficiency.
6. Incorporate sustainable design principles into *Building Design Standards Policy* and campus master plans to help lower energy consumption.
7. Collaborate with IT Department to develop strategies to promote energy efficiency behavior in IT and with computer users that will help reduce energy usage and costs.
8. Creating educational campaigns that establish smart energy use behavior norms for building occupants.

9. Work with Marketing Department to develop a college wide communication strategy for CAP energy reduction goals and the collegewide Energy Policy. Develop informational training materials about CAP goals/actions for:
  - RA's - Energy saving prompts in dorm rooms
  - Student Eco-Reps
  - Infuse into student orientation
  - Add information into new employee packets
10. Develop campus co-curricular programs and educational campaigns.
  - Campus interpretive signs and prompts to promote energy efficient behavior
  - Eco-Rep Program in residential halls
  - Green Living Guide for students
  - Student Green Warrior competition
  - Orientation activities to raise awareness, assess knowledge and behavior
  - Pre-move in packet information for residential hall students
  - Green Cup Energy Challenge Competition (by residence hall floors/by campus)
11. Examine campus master plans and look for future opportunities/new construction projects to apply energy conservation measures.
12. Amend ENERGY STAR Appliances and ENERGY STAR Computer settings to the current CMC Energy Policy.
13. Obtain ENERGY STAR ratings through Schooldude and share ratings with campuses.
14. Perform energy, water and lighting audits and implement necessary ECMs for all new and future buildings purchased.

## Renewable Energy

CMC is dedicated to producing or purchasing at least 15% of the College's electricity consumption from renewable sources. Over the past three years CMC has installed several solar photovoltaic and ground source heat pump systems. The high costs of renewable energy systems will demand that CMC become more creative in their funding mechanisms for future renewable energy projects. Some of the CMC local communities are developing innovative strategies to make renewable energy options affordable. It will be essential for CMC to collaborate with these community organizations on future projects.

**Current Initiatives:**

- On-site Solar Photovoltaic Systems
  - Aspen and Breckenridge Campuses each have a 10kW solar installation.
  - Rifle Campus has a 103 kW solar installation which provides 15% of its building's electricity. (Funded by a power purchasing agreement)
  - Leadville Campus has a 103 kW solar installation that provides 15% of this building's electricity. (Funded by a power purchasing agreement)
- On-site ground source heat pump system (GSHP) at the Spring Valley Campus & Steamboat Springs
  - GSHP system at Spring Valley is connected to the Quigley Library, Student Center and Sopris Resident Hall.
  - The new building in Steamboat Springs is connected to a GSHP system. The energy savings for the new building will reduce the cost of heating and cooling by 30%.

**Renewable Energy Plan:**

1. Update campus master plans to incorporate renewable energy sources.
  - Add on-site renewable energy systems at each campus which may include solar, wind, ground source heat pumps, etc. (System must be appropriate for that area/region.)
  - Install solar thermal hot water systems at residential campuses.
2. Examine the Clean Energy Collective community solar options. (Breckenridge, and other CMC locations)
3. Investigate the development of a revolving loan fund to help finance renewable energy (and conservation) projects.
4. Update *Facilities Design Standards* policy to commit to a specific percentage of renewable energy for new construction.
5. Create a utility provider resource portfolio documenting all utility companies that CMC contracts with for services.
6. Work with utility companies to purchase other renewable energy sources such as wind.
7. Purchase renewable energy credits from local utility companies. (Leadville)
8. Have 100% of purchase electricity & natural gas (methane, biogas) from carbon neutral sources.

9. Purchasing certified carbon offsets when all other emission reduction strategies have been examined and administrative policy supports such a purchase.
10. Collaborate with Clean Energy Collective, Garfield Clean Energy and the Governor's Energy Office on renewable energy policy and innovation.

## Transportation

The College's largest contributor to CMC's greenhouse gas inventory is Scope 3. This section includes transportation emissions from commuting and air travel mileage. Unfortunately, accurate transportation data is the most challenging data to gather, track and mitigate. Many CMC students and employees travel to more than one campus for classes, meetings or work related projects. Also, there are few alternative transportation or mass transit options in the rural areas of CMC. This factor alone will make transportation the most challenging section to address. However, transportation is an area that has the greatest potential for innovative solutions to occur within the CMC district communities.

### Current Initiatives:

- Facilities: Current college vehicle fleet
  - Fuel efficient college vehicles
  - Biodiesel snow plows in Steamboat Springs
- Human Resource benefits:
  - Employee bus pass benefit
  - Telecommuting options available for employees
- Distance learning provides travel-free options for students
- Conducted commuting survey to track commuting miles of CMC employees and students
- Employee Bicycle Program at Central Services
- Public bus service offered in most all CMC districts. However, no bus service is available for the Spring Valley site. Recently, a grant was awarded to study the possibility of bus service being provided to the Spring Valley site.

### Transportation Plan:

1. Design programs to raise awareness about the current transportation alternatives options that each campus district has to offer.
2. Promote employee HR benefits to lower emissions from daily commuting.

- Bus passes
  - Increase telecommuting & distance learning
  - Allow for compressed work weeks
3. Create incentive program to encourage the use of public transportation by students and CMC employees.
    - Bus pass benefit & incentive program
    - Work with regional transit service to add public transit routes
    - Improve bus scheduling and routes
  4. Hold focus groups to research what viable commuting options people are interested in engaging in at each campus.
  5. Create bicycle-friendly campuses at appropriate sites.
    - Establish a bicycling incentive program
    - Install secure and weather-protected bike racks
    - Create an on-campus bike repair shop
    - Provide showers & informal dress codes to accommodate bicycling commuters
    - Bike racks at all campuses
  6. Create incentive programs to encourage the use of carpooling by students and CMC employees.
    - Priority parking
    - Cash back program
    - Establish a safe rideshare program –Commuter Connect and Zimride programs
    - Collaborate with community partners (CLEER, RFTA, GEO, other) to develop sustainable programs.
  7. Buying the most fuel efficient, biodiesel electric or compressed natural gas vehicles to replace older fleet vehicles whenever possible.
  8. Collaborate with Garfield Clean Energy on compressed natural gas vehicles and gas stations possibilities for Garfield County corridor campuses.
  9. Improve methods for measuring transportation emissions such as commuting miles, air travel miles, fleet vehicle miles, etc. for easier GHG data collection, monitoring and reporting.



10. Implement a no-idling policy on campus.
11. Consider parking passes & parking fees on campus to encourage carpooling, alternative transportation usage and to generate funding for alternative transportation programs.
12. Work with CMC district transit authorities to expand bus routes and improve scheduling.
13. Work with Denver and Washington DC lobbyists to improve rural transportation funding.

## **Solid Waste Reduction**

Solid waste removal is an energy, budgetary and people intensive process. The college has been actively engaged in recycling for many years committing funding at each location to support this initiative. The Facilities Department, faculty, staff and students have been involved in making the recycling process work at each location. We are now combining our efforts of recycling and waste reduction to focus on our overall goal of reducing our carbon emissions. It simply makes sense for the college to focus on both areas of recycling and waste reduction. However, as we have implemented these programs, we have been faced with the reality of utilizing five different landfills, in five different counties, all of which have different processing requirements and procedures. These types of situations often have made it more complicated in addressing the issue of solid waste reduction.

### **Current Initiatives:**

- Pilot composting programs started at Spring Valley, Steamboat, and Leadville.
- Easy accessible recycling bins in the hallways & classrooms.
- Pilot RecycleMania Waste Reduction Program – Rifle and Steamboat Springs.
- Paper Wise confidential recycling service.
- Virtual library provides students access to electronic media. This reduces the emission impacts from transportation and natural resource extraction and disposal.
- Student run “Move Out & Reuse Program” at Spring Valley and Steamboat Springs.
- Trayless cafeterias at the residential campuses decreases the amount of food waste in the cafeterias.

### **Solid Waste Reduction Plan:**

1. Campus Recycling Programs
  - Expand programs (more classroom bins, work study to help with pickup/measurement, etc.)
2. Food waste reduction Programs

- Composting - Expand programs to all residential campuses (Sodexo)
  - Encourage less food waste in food production/kitchen
  - Energy efficient kitchen
  - Offer more vegetable options
  - Food share program
3. Green Events & Meetings
    - Events food catering – no waste policy
    - Purchase compostable utensils/cups for events
    - No individual, one-time use plastic water bottles (policy)
  4. Waste Reduction Program
    - Develop campaign for overall waste reduction to support recycling programs
    - E-waste program for cellphones, computers, etc.
    - Residential hall room recycling – eco-rep program
  5. Establish Move- In Day Recycling Program (volunteers)
  6. Move Out Program – expand to other campuses
  7. Printing labs reduction program – Work with IT on this
  8. Implement purchasing policies that discourage waste and wasteful purchasing
    - Contract vendors that are environmentally conscious (see Office Depot attachment)
    - Buy products made of green materials or products that contain recycled content
    - Buy local products when possible
    - Buy carbon neutral products
  9. Work with Waste Management to improve landfill practices in rural Colorado
  10. Develop a Recycling & Waste Management Policy

## Purchasing & Procurements

Colorado Mountain College is publicly supported college and recognizes its obligation to the taxpayers. As a member of the National Association of Educational Buyers (NAEB), CMC's Purchasing Department abides by and promotes the NAEB Code of Ethics. The College also recognizes its:

- Charge to maintain an effective and economical program for the acquisition of goods and services.

- Responsibility to create a competitive environment through fair opportunity and equitable treatment of all vendors.
- Accountability for the purchase of needed equipment, materials, supplies, and services at favorable prices in keeping with standards of suitability, appropriate quality, and reliable vendor performance.

**Current Initiatives:**

- Vendor selection criteria includes “Leadership in sustainability”
- Promotes “best purchasing practices” in its training sessions and reference manual
- Green cleaning products used by Facilities staff
- Supports the purchase, in bulk, of 30% recycled paper at the campuses

**Purchasing Plan:**

1. Educate the CMC community about the benefits of “triple bottom line” business strategies and responsible purchasing practices.
2. Improve Ellucian/Colleague procurement tracking capabilities per campus, especially for recycled paper, in order to promote transparency, the efficient utilization of resources, and the ability to collect data on specific resource consumption for required reporting processes, educational purposes and program development.
3. Product ROI and lifecycle analysis should be taken equally into consideration in order to:
  - *“Strive to obtain the maximum value for each dollar of expenditure”*
  - Promote “triple bottom line” business practices
  - Purchase longer lasting products that will lower solid waste removal emissions
4. Support more local vendors and businesses, when possible.
5. Work with food vendors to encourage more local food procurements
6. Chart emissions from Food Services: <http://www.cleanair-coolplanet.org/chefs.php>
7. Sign the Real Food Campus Commitment and *“pledge to buy 20% real food by 2020.”*  
<http://realfoodchallenge.org/commitment>

## Land Use and Grounds Management

Our seven Colorado Mountain College campuses are located in the north-central Rockies of Colorado. The College service area covers 12,000 square miles, three national forests, six wilderness areas and most of Colorado's major ski resorts. CMC campuses environments are very diverse ecosystems that range from high alpine, situated at an elevation of 10152 feet, to high desert, situated at an elevation of 5348 feet.

### Current Initiatives:

- Water audit completed at all campuses
- Landscape using native plants species
- Xeriscaping at specific campuses to lower water consumption
- Grounds watering schedules for evening to encourage maximum absorption

### Landscaping and Grounds Management Plan:

- Utilize cafeteria compost on grounds if properly prepared.
- Purchase organic fertilizer to lower nitrate emissions, when possible.
- Establish a green buffer zone to improve stream habitat, reduce bank erosion, restore floodplain forest, provide a corridor for movements of animals and plants, reduce overland flow of non-point source pollution from agricultural fields and other land uses, protect scenic and recreation values, and provide field sites for courses at the college.
- Incorporate sustainable design principles into campus land-use, transportation, and building plans.
- Create a campus planning commission that includes students, faculty, alumni, environmental architects and design experts, and community members to make recommendations for land-use, transportation, and building policies.

## Education

Education is the key to successfully meeting the requirements of the ACUPCC and CMC's biggest lever when it comes to inspiring change within individuals and the local community. CMC has made great strides in developing both sustainability-focused and related academic, career and technical training, continuing education courses and co-curricular programs.

**Current Initiatives:**

- BA in Sustainability Studies approved 2011
- CTE programs that provide green job training
- Sustainability-related and focused continuing education classes
- Co-curricular campus programs (waste reduction, energy efficiency, etc.) that promote student learning outside of the classroom.
- Educational publications & interpretive campus signs
- Faculty/Staff workshops & trainings
- Community outreach and events

**Education Plan:**

1. Design a concrete, strategic plan on how to develop the campus environment into “learning laboratories” so that students are provided experiential learning opportunities about outside the classroom. (Example: Utilize interpretive signage to inform students about renewable energy sources, green building attributes, energy and water conservation programs and waste reduction programs. Display real-time energy data and hold energy conservation contests between campus resident halls.)
2. Support campus green teams in developing more co-curricular programs & educational events at the campus.
3. Provide campus Green Teams with more funding and release time for faculty and staff members.
4. Encourage more student groups to start up sustainability-related clubs that focus on social and environmental justice and green business (Net Impact Club).
5. Develop a college wide support system to establish student internships programs with the plan to hire an internship coordinator.
6. Provide faculty real-time data (energy, GHG emissions data, solid waste, etc.) that can enhance academic, place-based educational opportunities on campus.
7. Have faculty and students work together (through an academic class or course elective) to conduct an GHG audit or STARS assessment for their campus.
8. Provide faculty formal workshops and follow-up trainings for infusing sustainability across the curriculum.

9. Offer sustainability graduation requirements.
10. Develop student eco-reps programs.
11. Collaborate with various departments to educate staff how sustainability methods can be utilized to reach strategic goals.
12. Establish sustainability leadership awards to acknowledge and celebrate “good work”.
13. Engage Instructional Chairs, Faculty Senate, Administration, Student Affairs, Facilities and other academic leaders to help infuse sustainability activities and knowledge.

### **Financing the Climate Action Plan:**

In the past the College has self- financed a majority of the retro-commissioning projects and energy conservation measures recommended by the ESCo. The Xcel solar farms have been financed through a power purchasing agreement. Due to statewide budget cuts and the introduction of the zero-based budgeting system, traditional financing is going to be more difficult to secure for future sustainability projects. The College commits to prioritizing CAP initiatives based upon need, ROI and lifecycle analysis and then examines for alternative ways to fund sustainability projects that can meet the needs of several campuses or departments in multiple ways.

CMC should consider developing financing mechanisms that can sustain college wide sustainability initiatives and create budgetary processes that can incentivize energy efficiency and carbon neutrality measures at the campus level. The follow is a list of financing methods used by college and universities nationwide:

- A revolving loan that can capture financial savings from energy conservation measures and be set aside directly for re-investment into sustainability initiatives.
- A sustainability fund that can collect revenue generated by donations of local businesses, alumni, and individual donors.
- A student green fee fund can help generate financing for student co-curricular programs, activities and clubs.
- Utility company rebate programs
- Third-party financing
- Local, state and national grants for long-term program development

For a list of all available utility rebates and local, state, and federal grants, visit the Interstate Renewable Energy Council (IREC) DESIRE program website at <http://www.dsireusa.org>

## Tracking Progress and Next Steps:

The college cannot manage what it cannot measure so it is important that CMC develops a variety of metrics to gauge the effectiveness of all sustainability projects and programs. These metrics will allow the college to collect accurate quantitative and qualitative data about its greenhouse gas emissions and its sustainability efforts, provide accurate return on investment statistics and allow for transparency regarding daily business practices of the college. The college sustainability staff already uses a variety of standardized metric tools, recommended by AASHE, to collect data including the Clean Air Cool Planet GHG calculator and the STARS self-assessment tool as well as the college's Ellucian/Colleague (software) system. This data can be utilized for academic research, grants and to enhance student learning. It is important for data and reports to be shared with stakeholder and to be made public. Clear communications regarding CAP goals, interim targets, and accomplishments can help educate the campus and community-at-large about the principles of sustainability. It is recommended that sustainability staff be specifically hired to coordinate and oversee college wide program development, data collection, data analysis, public reporting and communications.

As each campus begins to design specific co-curricular programs it will be highly recommended that a metrics system be established to measure the effectiveness of each program. Most sustainability projects should start as a pilot that engage campus and community stakeholders and have measurable outcomes that benefit the triple bottom line. This data will directly help programs successfully grow, provide student-learning experiences, supply feedback about the programs strengths and weaknesses, and produce data that can be submitted for future funding.

## Conclusion:

Measuring greenhouse gas emissions should be the cornerstone of CMC's sustainability initiative. By establishing an initial CAP framework the College can begin working more effectively and efficiently towards carbon neutrality. This document is a living document that will grow and change as the new technologies, policies and partnerships develop over the years. Collaboration will play a vital role in the advancement of the College's sustainability efforts. It will require effort from every employee and student at CMC as well as the coordination of efforts and the development of new legislation and programs by state government, local municipalities and community groups. By meeting the requirements of the ACUPCC, Colorado Mountain College will be leading the charge for institutions of higher education in Western Colorado by creating a healthier and more resilient future for our students and our communities.

## Appendix:

**2009-2010 Greenhouse Gas Emissions Inventory Report**

**2009-2011 Sustainability Strategic Plan**

**Sustainable Energy Conservation Policy**

**Building Policy**

**AQIP sustainability 2009 Report**

**Green Survey Results 2009**

**Office Depot Global Environment Strategy**

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Rifle Campus Solar Thermal Classes 2009-2010