Central New Mexico Community College (CNM) is a student centered organization, dedicated to accessible and affordable post-secondary occupational training, preparatory work, workforce training, college transfer and opportunities for lifetime learning. As the largest state community college, CNM operates within the guideline of the New Mexico Higher Education Department that coordinates New Mexico publicly supported post secondary education.

CNM began its journey to become more sustainable in 2009 when President Kathie Winograd signed the American College and University Presidents Climate Commitment, and committed CNM to integrate sustainability into all area of the campus culture. CNM launched it sustainability plan with the creation of a “President’s Sustainability and Climate Commitment Task Force” which defined nine area within which Sustainability should be implemented, including both academic and facilities. The team worked quickly to implement the plan with projects such as changing custodial work hours to allow for building lights to be turned off earlier, drought tolerant landscaping, limiting paper use, placing recycling containers throughout campus, and free bus passes for students. As a commitment to sustainability, the task team was chaired by the President office Communications officer, the Executive Director of the Physical Plant and a representative from the Institutional Planning the Research to ensure the campus community understood the importance of the commitment.

CNM’s commitment to transforming the way it does business is evident in its innovations. CNM was the first in the New Mexico Higher Education sector to construct the largest LEED Gold and Silver facilities. It was also the first to acquire LEED Gold for renovating an existing manufacture space. In total approximately 600,000 sf of the campus have been certified LEED or are pending approval. CNM was also the first to incorporate hydration stations throughout each facility to reduce plastic bottle waste and the first to partner with companies such as Waste Management to divert 42% of the waste within the first year. CNM was also the first in the state to develop a fully sustainable Master Plan for the Rio Rancho Campus and apply the principles to the first building constructed on that campus and won the New Mexico Planning Association award for innovation in planning and facility planning. The first building on the campus also was awarded best building award 2010 in higher education from the southwest contractors representing Arizona, New Mexico and Nevada.

In 2009, the Governing Board approved CNM’s Environmental Sustainability and Climate Neutrality Plan and updated the overall strategic plan to include a statement related to sustainability to ensure the college’s commitment to the effort.

In 2013, the focus turned to engaging faculty who were integrating sustainability throughout the curriculum. The goal was to encourage the broad college community of staff, faculty and students to adopt the practices and ideas of sustainability while integrating “Campus as a Living Lab” curriculum into both STEM classes (where curriculum is more traditional) and general education and humanities courses (where such curriculum is less common).Now a new twenty-five-strong team is continuing to search for ways to integrate sustainability with the classroom and bring transformational change to CNM.

Last summer, four projects were initiated and build upon the as a starting point to document and expand the opportunities for faculty and facilities. The first project included faculty/ facilities partnership in Recyclmania to further enhance the waste and recycling efforts on campus. The second project is Photovoltaic project to install solar panels at four campus locations. The third is to work with faculty, facilities and staff to document all the efforts using the American Association of Community College (AASHE) Sustainability Tracking and Assessment System (STARS) to formally document all the sustainability initiatives and the fourth project is the use of the existing facilities building control systems within the classroom environment to allow for “Campus a Living Lab” Opportunities.

Project 1 Recyclemania. In 2009 CNM had a small recycle effort that included aluminum cans, metals from the Physical Plant and cardboard from shipping and receiving. With the creation of a Task Team, a focused effort was placed to replace the current agreements with various vendors into one request for proposal to select one company to consolidate services with an emphasis on recycling. The team worked on writing the request for proposals to include a review of service pickups, review of waste streams and educational component to educate staff and students on appropriate recycling efforts. The RFP required that waste be diverted by 20% each year and to work with CNM on various recycling initiatives. As a result Waste Management was selected as the contract for the service and immediately began reviewing waste stream and waste pick up and came with a proposal to relocated recycling dumpsters to collect all cardboard and fiber waste. Training was provided to each custodial staff member and recycling bins were located in the classrooms and around the campus to promote recycling. Within the first year, CNM was able to divert 42% of its waste stream. Effort to increase the amount of recycling continued to stay constant since the effort required the participation and awareness of students. In Spring of 2013, Faculty, Facilities, Waste Management and Service Learning combined efforts to bring greater awareness on the issue and decided that participation in the Keep America Beautiful Recyclmanina competition. Recyclmania is friendly completion among University and Colleges to promote waste reduction activities to their campus communities. The goals of Recyclmania aligned with CNM goals to reduce our waste stream. By motivating students and staff to increase recycling efforts and reduce waste generation. This project brought together Psychology, creative writing faculty in the Humanities with Service Learning that combines community service with classroom instruction and the CNM Physical Plant operations to compete in the tournament. Classes from Psychology began to study the behavior patterns related to waste and recycling and noted location for recycling bins. Service Learning offered options to students from all disciplines to work with facilities as the community partner so that they could see what efforts goes into collecting waste and what impact the waste has on environment. Waste Management collected and weighed all the recycling to participate in the tournament. Creative Writing Students wrote technical papers on why it is important to recycle, and anthropology students studied the waste stream to study cultural behaviors. The learning community quickly moved to create an activity titled Mount Trashmore and over one hundred students participated. The efforts of working with faculty, students and faculty have increase the waste diversion rate by 53% and reduced our waste by 5%. The plan is to continue these efforts to continue transformation change at CNM.

Project 2 Photovoltaic Project Facilities partnered with Faculty to develop a “Campus as a Living Lab” concept centered on photovoltaic panels. Faculty worked with Facilities to write language in the Request for Proposal to ensure the vendor would participate with faculty to provide real hand on learning experiences for students. The Request for Proposals included language that provided additional points to vendors to include their educational opportunities for students. Faculty from diverse disciplines came together to participate. Faculty included Adult Education, Electrical Trades, Chemistry, and Math. The project proposed included developing four systems at various campuses throughout the district and to provide a computer dashboard that could be used by faculty in the classroom. The group of faculty developed learning outcomes based on the project and the vendor and engineer have made themselves available to all the CNM community to go into classrooms to discuss photovoltaic and the solar panels. Students have been given greater access to think outside of the theory classes and to gain some real life opportunities about jobs that exist in the industry, leading to more connections between education and community.

Project Three, STARS Implementation. A need to begin documenting all the sustainable efforts on campus, the facilities department began to work with faculty, staff and students to input the information into the STARS system and to begin working on creating a responsible party for each area of sustainability to allow for CNM to provide a framework on where to target sustainability issues and to create greater buy in, so that all efforts could be documented to celebrate successes. CNM contracted with a consultant named ECOMOTION to assist CNM in reviewing the data inputted and to work with individual staff to understand the idea behind STARS. Facilities also partnered with Academic Affairs to provide course release to faculty to participate in collecting data. Understanding that faculty respond better to request for information from faculty members, a faculty from the Math Science and Engineering Department was selected to assist in the creation of a survey to solicit information of what is occurring in the classroom around the issue of sustainability. The information allows CNM to visualize all the courses that are developing curriculum and methods of instruction centered around sustainable efforts and provides a snapshot of classes that could benefit from a “campus as a Living Lab” concept. All responsible parties have been collecting data and CNM has reached a Bronze status to showcase to the CNM community that all their sustainable efforts are paying off. The announcement of the rating is scheduled for Earth Day 2014 and will help set the framework for the next level of efforts to move CNM closer to its goal of becoming a sustainable model for other community colleges in New Mexico and the United States.

Project Four, with the new construction projects meeting LEED Silver and a master plan that call for the renovation of four additional buildings on campus in the next two years, an opportunity arises to develop an integrated system related to building controls to further mange energy use on campus. Building controls on campus were identified to bring facilities and academics together to strengthen the development of energy literacy for students and stakeholders in their understanding energy efficiency and conservation efforts. This project brings together Facilities, Faculty and Industry partners to develop a Request for Proposal that addresses the needs of facilities to integrate all the buildings on campus as well as the needs of instruction to provide “Campus as a Living Lab” opportunities for students. WH Pacific was selected to assist in the development of the needs and the creation of the Request for Proposal that includes faculty and student engagement. Funding for the project has been secured and the draft Request for Proposal is being reviewed. The intent is to develop a parallel system on all building controls to allow for faculty to create exceptional building technician educational programs at the local, regional and national levels using the campus as the training center. The project has brought HVAC Faculty, Electrical, Plumbing and Construction Management together to improve energy efficiency on the campus as well as providing real world experience into the classroom.

The project listed demonstrate the commitment of CNM to the issue of Sustainability but to create transformational change the commitment must include resources to coordinate and integrate sustainability efforts within the college. Facilities has been working with Instruction to create a process for funding sustainable project and have received approval to use all energy rebate funding to create a revolving fund to support future sustainable projects. Academics has created a rubric to determine future Campus as Living Lab projects. The process addresses how the projects will lead to enhanced student learning outcomes and lead to certificates within their fields. To continue to move CNM forward with agility and flexibility to make changes to programs, courses and workforce development, CNM facilities and Academic Affairs are partnering to house a faculty member within the Physical Plant to document and implement further sustainability polices and practices aimed at reducing impact on the environment and promoting green economy and job expansion in green workforce development, while keeping the sustainability momentum front and center.

Facilities and Academic Affairs are working together to ensure that campus as living lab projects remain sustainable. This summer, a teaching faculty will be housed in the Facilities Department at CNM to assist in working to ensure that the campus as a living Lab model is made permanent, by assisting the department in recognizing opportunities for faculty and students and to assist faculty in developing learning outcomes that lead to certification within their field of study. CNM’s vision for engagement, people, social interaction, a hundred different things to bring sustainability in the classroom, helps CNM shift attitudes from the conventional to the more inspiring, that focuses on creativity becoming one of the most coveted social assets for the postindustrial campus to the increasingly knowledge based campus of the future. The idea is to take the focus off just the built environment and put it in the things that happen in the classroom create a lynchpin for sustainability that encourages creative exploration and experimentation to help improve our environment by allowing participation in the process to re-spark latent sustainability spirits.

Sustainability has become one of the focal points of CNM to demonstrate to the Albuquerque Community and the State of New Mexico to think out of the box and to see into the future of what New Mexico can become as we work are creative energies together.

Luis Campos,

Executive Director of Physical Plant

Central New Mexico Community College