INTRODUCTION

BACKGROUND/HISTORY

The Climate Action Plan is the culmination of a process of increasing awareness and action on the part of Radford University. For example, in 1991, then-President Donald Dedmon along with the members of the Virginia College and University Presidents’ Council, signed the Talloires Declaration, committing the university to a path to respond to environmental challenges faced by many. Radford continued its efforts on the facilities side as well including receiving grants in the mid-1990s to replace less efficient T12 fluorescent lighting style with the better quality, more efficient T8 style. In the mid-2000’s, Radford began incorporating infrared technology and installing additional building automation systems to control Heating, Ventilation, and Air Conditioning (HVAC) controls in residential hall renovations.

With a long history of recognizing its leadership role in addressing environmental challenges that we face, during the Radford University convocation in August 2008, President Penelope W. Kyle announced that she was initiating an aggressive effort to make Radford University one of, if not the, most environmentally sustainable campus in the Commonwealth. She would be appointing a Sustainability Steering Committee (SSC) representing all parts of campus including student affairs, facility services, and academic affairs to recommend a course of action to meet that goal.

At the Steering Committee’s first meeting in October 2008, President Kyle charged the committee with recommending to her and the Cabinet how to build new buildings that use less energy, to upgrade our recycling efforts and perhaps coordinate those with the City of Radford, and to consider other sustainability initiatives. Her goal was to have RU be recognized across the Commonwealth as a distinctly “green” campus. The Committee would serve as a venue for reviewing sustainability recommendations that cut across organizational boundaries and provide input into recommendations from the broad RU community.

Potential areas of focus included harnessing the energy of the student body as a driving force for sustainability initiatives; looking at LEED certification for all new buildings and renovations; conducting a baseline greenhouse gas emissions inventory; and, generally promoting sustainability which is a criteria by which external rating groups (e.g., Princeton Review) evaluate and rate universities. Another area of discussion should be exploring membership in the American College and the University Presidents’ Climate Commitment (ACUPCC).

The ACUPCC was formally established in 2007 with the mission to “accelerate progress towards climate neutrality and sustainability by empowering the higher education sector to educate students, create solutions, and provide leadership-by-example for the rest of society”. By signing the commitment, ACUPCC institutions have agreed to: 1) Complete an emissions inventory, 2) Within two years, set a target date and interim milestones for becoming climate neutral, 3) Take immediate steps to reduce greenhouse gas emissions by choosing from a list of short-term actions, 4) Integrate sustainability into the curriculum and make it part of the educational experience, and 5) Make the action plan, inventory and progress reports publicly available. The ACUPCC is celebrating five years of formal existence and has nearly 700 signatories including small technical colleges, community colleges, private and state-supported liberal arts universities, and large research universities.

Radford University’s President, Penelope W. Kyle, signed the ACUPCC document in celebration of Campus Sustainability Day in October 2009 (implementation start date January 15, 2010). As an ACUPCC signatory, RU has committed itself to becoming climate neutral at some point in the future. Commitment step 1 included a) creating an institutional structure to guide the development and implementation of a CAP, b) completing a comprehensive GHG inventory within one year of the implementation start date, and c) developing a CAP within two years of the implementation start date. Commitment step 2 included initiating two or more actions from a list of seven to reduce greenhouse gases. At the time of the signing, RU had already taken many of the commitment steps that are outlined by the ACUPCC. RU had an institutional structure in place, the SustainABILITY Steering Committee (SSC). In addition, RU had initiated four tangible actions including a LEED-Silver minimum standard for new campus construction, an Energy Star purchasing requirement, providing and encouraging public transportation access for students, faculty, staff, and visitors, and by participating in the Waste Minimization component of the national RecycleMania competition along with adopting 3 or more associated measures to reduce waste (e.g. campus recycling program, campus surplus department, using inter-office reusable envelopes, implementing campus printing initiatives, etc.).
PROCESS

RU selected the Clean Air-Cool Planet’s (CACP) Campus Carbon Calculator to assist with the collection, calculation, and analysis of its emissions. The CACP Campus Carbon Calculator is a preferred tool of the ACUPCC as it was designed specifically for campuses, is consistent with GHG protocol standards, and is commonly used. While starting the collection process with earlier versions of the calculator, the CACP Campus Carbon Calculator (V.6.6) was the latest at the time of reporting with which incorporated data from the Intergovernmental Panel on Climate Change’s Third and Fourth Assessment Reports.

The organizational boundary selected included all RU buildings under operational control or the control approach. The determination whether to include or exclude certain buildings was based on whether or not the university paid the utility bills. The temporal boundary selection was based on the fiscal year 2010 data (July 1, 2009-June 30, 2010). These determinations were largely selected for future reporting consistency and the relative ease of data collection.

The greenhouse gas inventory process included many individuals, departments, and the continued support from the SustainABILITY Steering Committee (SSC), the administration, and others without whom this inventory could not be completed. Every effort was made to provide the most comprehensive snapshot of Radford University’s greenhouse gas emissions including the most accurate and up to date data available with the resources available.

The greenhouse gas inventory process began with the data collection phase and the recognition that some data were not readily accessible or did not exist at all. For this reason, some data were collected over years while other data collected are for the most recent fiscal year only. An additional benefit from this method allows for the distribution of time, costs, and other resources to be dispersed over years. The next phase of the inventory included calculating the greenhouse gas emissions. As data were collected, they were entered into the CACP calculator to determine the relative amount of emissions. The final phase of the inventory includes the analyzing and summarizing of the results. Analyzing the data helps to understand what actions are contributing to the most emissions and where they come from. By summarizing the inventory and emissions results, the university is able to educate individuals and to take the steps necessary to reach its goal of carbon neutrality.

With the greenhouse gas inventory completed and publically available on the ACUPCC reporting website, attention then turned to developing the CAP. In determining the resources available, the SSC determined it was best to utilize the most amount of time available to the university. So, two deadline extensions were ultimately filed with the ACUPCC during the process.

In continued efforts, assistance from an outside consultant was sought to help launch the effort, gather information about campus attitudes and expectations, and provide technical expertise in a limited timeframe. Moseley Architects was selected as the consultant to assist Radford in this monumental effort. Along with Moseley, two other consultants, 2rw and LandDesign provided additional support.

To kick off the CAP development efforts, three one-hour workshops were hosted by RU’s Sustainability Steering Committee on Thursday, April 28, 2011, in the Hurlburt Student Center to solicit campus input. The workshops were open to students, faculty, staff, and others that are interested in the development of the CAP. The workshops featured presentations on the CAP planning process, environmental issues and university efforts toward carbon neutrality as well as discussions during which ideas and suggestions were discussed.

Likely based on familiarity with the topic in general as well as personal beliefs, responses to questions on the CAP questionnaire varied greatly. When asked by what year should Radford commit to becoming carbon neutral, responses ranged from 2018 to 2050. Mitigation strategy recommendations included overall energy reduction, improved energy efficiency, implementing renewable energy, and transportation issues including “fixing” the Tartan Transit routes. Some recommendations on potential additional course offerings included alternative energy, special focus areas like the New River or environmental health topics, and including more Core or introductory courses that included sustainability-related topics. Additional responses to the most effective ways to inform and involve the broader campus included guest lectures, to campus competitions, community events, and more.
The SSC created two Technical Working Groups (TWG) to consider comments, study the options, and develop a comprehensive plan. The TWGs were formed during the 2011 Fall Semester. One of the TWGs was the Mitigation TWG which focused its efforts on energy usage and transportation related to campus operations, while the other, the Education, Research, and Outreach TWG, focused its efforts on curriculum, research, and the community. Both TWGs were tasked with submitting draft recommendations to the SSC by January 13th, 2012.

Invitations for volunteers to research and develop goals were sent out in September to the campus through various outlets including the RU Today, a newsletter published by the Office of University Relations, the sustainability website (www.radford.edu/rugreen), Facebook page, and others. Periodic progress reports were also relayed to campus using the same outlets. The SSC did not meet again until February to allow sufficient time to collect, analyze, and edit the recommendations. Collecting the recommendations and compiling them along with the other requisite info into a comprehensive document required considerable time and effort. So much so, that the SSC determined that a second four month extension would be beneficial to the overall process and document. With the draft recommendations and report in hand, it was time for routing the CAP document to various campus stakeholder groups to obtain comments, suggestions, and ultimately support for submitting the document to President Kyle and the Board of Visitors for approval. Upon receiving approval, the Sustainability Coordinator was responsible for submitting the CAP to the ACUPCC reporting website.