

Financial Implications for the College signing the Presidents Climate Commitment

William and Mary is a small public university in a state which perennially faces budget shortfalls. The college has been ranked amongst the highest in the country for doing the most with the least amount of resources, and our response to the American College and University Presidents Climate Commitment (PCC) will likewise have to be an extremely efficient one with low upfront capital costs. Innovative funding sources and strategic planning will allow the college to quickly recoup investments and save millions of dollars in energy bills over the next three decades. This report was written in response to President Nichol's request for a review of the financial implications of William and Mary signing the PCC.

Financial obligations of signing the PCC

1. *Creating an Office of Sustainability:* The most significant financial commitment in the first section of the PCC requires that institutional structures be created to guide this process within the first two months of signing. If a Sustainability Office is created, the annual budget is estimated between \$60,000 and \$150,000 per year, scaling up from lower initial costs. However, understanding that this funding may not be immediately available, a newly formed Sustainability Committee of faculty, staff, students, and alumni with substantial sustainability expertise could serve as the support mechanism for the College until the necessary resources are attained in 1-3 years and the office establishes itself as an effective body.
2. *Interim Programs and Policies:* The second section of the PCC lays out a menu of concrete interim programs and policies that colleges could and should adopt. Some will be extremely easy for W&M to accomplish at nearly zero cost; others will take more time and funding.
 - a. *Education Campaign:* The first step is a low-cost education campaign on sustainability with leadership efforts from the top and mobilization by the Student Environmental Action Coalition (SEAC) and faculty/staff sustainability groups.
 - b. *Procurement Guidelines:* Perhaps the optimal option would be to adopt an Energy Star Appliance Purchasing Policy, which would not only reduce energy consumption but would also save money over time. The College already purchases Energy Star Appliances but this practice could be formalized.
 - c. *Self-funding Behavior Incentives:* W&M already provides free access to public transportation; however, a well directed Greening W&M campaign could strengthen student utilization and increase bicycling, walking, and carpooling to work. Fiscal incentives could be provided with modest increases in parking permit prices.
 - d. *Renewable Energy Portfolio Standard:* Buying a minimum of 15% of our electricity from renewable sources is currently more difficult for W&M than for other universities some of which are already purchasing up to 100% of their energy from renewable sources (<http://www.bowdoin.edu/news/archives/1bowdoincampus/003120.shtml>); but should be included in the long-term plan to be developed by the Office. Experts anticipate these becoming available and affordable in the next five years, including in Virginia. A wind farm is being considered off the VA Beach coast and would provide low cost renewable energy.
 - e. *LEED Silver Building Requirement:* Currently the College's Sustainability Policy commits us to building all new construction to LEED Green certification standards. The average marginal cost of increasing to LEED Silver is only 1.45% and brings significant additional economic, social, and educational benefits. Moreover, the costs of green construction have been overestimated by as much as 300% as shown by a recent study by the World Business Council on Sustainable Development co-chaired by Lefarge and United Technologies Corporation (<http://www.wbcsd.org/web/eeb>). Schools in Virginia such as the Charlottesville

- Waldorf School have already committed to building to LEED Platinum standards and are attracting significant investment from foundations and individuals (<http://greenestschool.org>).
- f. *Travel Offsets*: Another program that would be relatively easy to implement would be the purchasing of offsets for the carbon emissions from faculty and school sponsored air travel. This would require that an additional \$1 - \$5 be budgeted for each flight; a cost which if spread among various departments and programs is relatively insignificant. The value of offsets is debated, but forcing units to do this begins the process of consideration of whether the travel was necessary, whether lower-carbon options (like trains or carpooling) were possible, or whether video-conferencing could have sufficed. These changes in travel behavior could save the college hundreds of thousands of travel dollars a year.
3. *The Longer Term Pathway to Carbon Neutrality*: Implementing the broad program that the Office of Sustainability and the Sustainability Committee would create for W&M to go carbon neutral is flexible and long term. Incremental steps will be made first to reduce consumption, increase efficiency, purchase clean energy, and then at the very end offset the small remainder of emissions we are left with. Broadly, the goal should be built around 2 to 3% per year reductions in our carbon footprint. Technological advances and increases in supply are likely to drive down the price of energy efficient equipment and electricity from renewable resources.

Innovative Finance

Within the traditional budgeting of the College, resources are tight. But signing the PCC opens several other avenues to funding major and minor projects to drastically reduce William and Mary's unsustainable carbon emissions.

1. The Association for the Advancement of Sustainability in Higher Education (<http://www.aashe.org>) provides signatories of the PCC with tools and best practices to help develop their program and obtain funding from sources otherwise not available to William and Mary.
2. A variety of grants could be used to get the Office of Sustainability off the ground, much like for the Office of Student Volunteers in the early 1990's. These include grants from private foundations, such as the Mellon Foundation, the Rockefeller Foundation, the Compton Foundation, and the Alcoa Foundation, or public agencies, such as the Environmental Protection Agency or the Department of Environmental Quality.
3. For other projects that would bring enormous energy savings to W&M but would also require capital investment, there are several options.
 - a. Student Assembly and Senate instituting a student Green Fee to help offset some of the cost of the Office of Sustainability or start a revolving loan fund as other universities have done (http://www.aashe.org/resources/mandatory_energy_fees.php).
 - b. The Class of 2008 is considering a Senior Gift earmarked for campus sustainability efforts.
 - c. This topic captures the attention of an entirely new segment of Alumni who have remained largely underutilized: a strong partnership with the Office of Sustainability and the Alumni Association would open new avenues of funding for W&M to step forward as national leader.
 - d. Financial institutions, public agencies, and private not-for-profits are now partnering with AASHE and universities across the country to provide extremely low interest loans to start revolving loan funds for capital investments designed to produce energy savings.
 - e. Although Virginia is currently facing a budget shortfall, Governor Kaine has made reducing the energy consumption and environmental impact of Virginia institutions a top priority. Successful lobbying for sustainability development funding over the next few years could therefore bring new revenue to the College. In particular, an Energy Investment Bond for Education could be cooperatively campaigned for among VA colleges and universities.

Summary

Signing and beginning to implement the Presidents Climate Commitment has the following financial implications for the College of William and Mary:

Initial Costs (first 2-3 years):

Year 1

1. Sustainability Committee: \$5-10,000
2. Education Campaign: \$8,000.
3. Procurement Guidelines: Energy Star Appliance Purchasing Policy: \$0
4. Restructuring Fees to provide disincentives and incentives: net \$0
5. Joining The Association for the Advancement of Sustainability in Higher Education (AASHE): \$1,000/year

Year 2 or 3

1. Creating an Office of Sustainability: Annual budget estimated between \$60,000 and \$150,000 per year, scaling up from lower initial costs.

Initial Finance (first 2-5 years)

1. Investment from President's, Vice-President, Provost and Deans: \$20,000/year.
2. Student Assembly and Senate to creating a Student Green Fee to help offset some of the cost of the Office of Sustainability or start a revolving loan fund: \$60,000/year
3. The Class of 2008 potential earmarked Senior Gift for sustainability efforts on campus.
4. Alumni donations.
5. Low interest loans for capital investments designed to produces energy savings.
6. Energy Investment Bond for Education cooperatively campaigned for among VA colleges and universities.