

Resolution on Climate Commitment

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University of Virginia Faculty Senate

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Preamble. The latest report (2007) of the United Nations' International Panel on Climate Change (IPCC) documents a wide range of evidence demonstrating unequivocally that anthropogenic emissions of carbon dioxide and other compounds are significantly altering Earth's climate (see <http://www.ipcc.ch/>). The IPCC includes a broad cross section of leading scientists in the field of climate research. It was recently awarded the Nobel Peace Prize for its efforts to understand Earth's climate system and to educate people worldwide regarding climate change.

Based on the IPCC projections, immediate and substantial reductions in emissions of green-house gases will be required in order to minimize by mid-century the more severe disruptions associated with warming projected in a business-as-usual scenario (see the recent article in *Science*, <http://www.sciencemag.org/cgi/content/full/318/5854/1230>). The socioeconomic implications are very serious. Growing alarm among climate scientists in response to the slow pace of governmental action has led several prominent scholars, including the Nobel laureate Dr. Paul Crutzen, of the Max Planck Institute in Germany, to recommend active research into controversial geo-engineering approaches for regulating climate should we experience a runaway greenhouse effect (see for example the following articles in *Science* <http://www.sciencemag.org/cgi/content/full/314/5798/401a> and <http://www.sciencemag.org/cgi/content/full/318/5853/1054>).

Existing programs. The University of Virginia has a distinguished tradition in environmental research, education, and management, and today is consequently well-positioned to assume a leading role in reshaping both energy use and ingrained social habits, as will be required if we are to address seriously the challenges that lie ahead. Major University actions and policies in this area include:

- Establishment in 1969 of the country's first Department of Environmental Sciences (<http://www.evsc.virginia.edu/>), which has served as a model for the creation of interdisciplinary departments and schools at many other institutions.
- Adoption in 2006 of the U.S. Green Council's *Leadership in Energy and Environmental Design* (LEED) standards to minimize the environmental impact of building, renovating, and operating structures on grounds (<http://www.usgbc.org/>). Design and construction of the South Lawn Project are driven in part by the LEED principles.
- Implementation under Facilities Management of an *Energy Management Program* that seeks both to increase energy efficiency and minimize the environmental impact of providing services throughout the University (<http://utilities.fm.virginia.edu/energy/index.asp>).
- Establishment under the Office of Environmental Health and Safety of the *Environmental Management System* that, in addition to other activities, evaluates the environmental impacts of business decisions and establishes goals for improving energy efficiency.

--Completion in 2006 of a detailed *Sustainability Assessment* under the direction of the Office of the Architect (<http://www.virginia.edu/architectoffice/susassessment.html>). Recommendations for reducing the University's energy consumption are now being considered by the *Sustainability Advisory Panel* consisting of administrators and faculty.

--Present consideration of a new *Initiative for Global Sustainability*, to address the challenges of protecting our natural environmental heritage and of educating a new generation of leaders in conservation and natural resource management (<http://www.virginia.edu/planningdocuments/commission/2MRC/3%20Appendix%20D%20TenPromisingIdeas.pdf>).

In light of both this existing commitment and the newly emerging evidence of climate change, the University can and should do much more in order to lead by example, to fulfill its educational mission for students, and to demonstrate to its many constituent communities an affirmative response to a broad scientific consensus.

Resolution. Motivated by a sense of civic and global responsibility, the Faculty Senate hereby resolves that the University of Virginia should substantially elevate its commitment to reducing emissions of greenhouse gases by taking the following interrelated steps:

- 1) The President and the Board of Visitors should issue a strong public statement that recognizes the gravity of the present situation, lays out a vision for moving the University towards climate neutrality, and details a specific immediate goal (for example, a 30% reduction in green-house gas emissions based on CO₂ equivalents over the next ten years), along with a plan of action and allocation of sufficient resources to meet this goal.
- 2) To provide a quantitative context for evaluating the cost-effectiveness of various reduction strategies (alternative fuels, efficient mass transit, retrofitting insulation, etc), the University should implement a detailed energy audit and corresponding emissions inventory for greenhouse gases, similar to the surveys conducted by other institutions (e.g., the University of New Hampshire, Harvard, and MIT; cf. http://www.sustainableunh.unh.edu/climate_ed/greenhouse_gas_inventory.html). Developing such an emissions inventory would make a valuable, multi-semester applied project for upper-level undergraduates or masters students (thereby contributing directly to the curriculum). Students would gain hands-on knowledge about one of the central problems of our time and the University would obtain valuable information.
- 3) The University should move quickly to implement the recommendations of the Sustainability Assessment of 2006. No-cost, common-sense changes in behavior to reduce energy consumption should be adopted throughout the community. Unit supervisors should instruct staff members to turn off lights and turn back thermostats wherever possible. *Energy efficiency should be specifically mentioned in job descriptions and rewarded through performance evaluations. A culture of energy conservation should be strongly encouraged.*

- 4) The University will be unable to achieve its goals of evaluating, tracking, and reducing energy use without the assignment of additional resources. At present the Environmental Management System seems understaffed, given the broad scope of its energy-auditing effort. In the interest of efficiency and greater effectiveness, the President and Board of Visitors should consider consolidating the Energy Management Program, energy-related components of the Environmental Management System, and other ongoing and planned conservation-related activities *under a single high-profile individual*. Such a figure would ideally occupy an independent, cabinet-level position, charged with coordinating the University's conservation-related initiatives and *given the administrative authority to require adherence to conservation standards*.

- 5) As the University moves towards achieving climate neutrality, future consideration should be given to our endorsement of the American College and University Presidents' Climate Commitment (ACUPCC, posted at <http://www.presidentsclimatecommitment.org>). The presidents of ca. 500 colleges and universities (including many in-state institutions such as George Mason, James Madison, U. Richmond, and W&L; seven of the twelve schools in the ACC including UNC Chapel Hill; and numerous other peer institutions such as Cornell and the California University system including Berkeley and UCLA) have now signed the ACUPCC pledge, which commits institutions to work actively towards reducing emissions of greenhouse gases. By eventually becoming a signatory of the ACUPCC, the University would participate in a commendable, high-profile national campaign even as it gained recognition for its own institutional efforts at energy conservation.

Implementation of these recommendations will help move the University of Virginia to the forefront of national and international efforts to slow the dramatic pace of climate change that we are currently experiencing, thereby minimizing the projected negative impacts on our students, children, and grandchildren