

GETTING STARTED WITH SUSTAINABILITY PLANS

VIRGINIA
COMMONWEALTH
UNIVERSITY

OCTOBER
2009

VCU PROFILE

- ✓ **2nd largest university in VA (32,284) Largest employer in Richmond**
- ✓ **196 Buildings (40 prior to 1900 + 54 are historic) 6.7 million SF**
Oldest: 1816 VA's First LEED Platinum Building (VCU Rice Center)
- ✓ **MP Campus: 88.2 acres + MCV Campus: 52.4 acres = 140.6 acres**
Virginia BioTechnology Research Park: 34 acres (3,000 employees)
VCU Rice Center: 343 acres + additional 88 acres Total: 605 acres
- ✓ **Undergrad: 22,792 (70%) Grad: 7,869 First Professionals: 1,623**
Roedonco Hall Capacity: 4,986
- ✓ **18,218 employees (1,927 faculty + 8,586 classified staff)**
VCU: 10,535 (58%) VCUHS: 7,683 (42%)
- ✓ **Annual budget: \$2.2 billion**
Employees + students annually spend \$796 million in Richmond MSA
- ✓ **\$220 million annually in sponsored research**
- ✓ **208 certificate & degree programs 15 schools & one college**

SUSTAINABILITY – HISTORY AND CONTEXT

Declarations/Commitments

- Talloires Declaration – 1991
- American College & University Presidents' Climate Commitment (ACUPCC) – April 2008

Staffing

- VCU Recycling Coordinator – March 1998
- VCU Energy Manager – August 2007
- VCU Director of Sustainability – July 2008

Presidents' Climate Commitment – April 2008

- VCU Sustainability Committee – November 18, 2008
- Greenhouse Gas (GHG) Emissions Inventory – March 5, 2009
- VCU Statement of Sustainability – July 22, 2009
- O'Brien & Gere - Climate Action Plan (CAP) consultant – Sept. 28, 2009

AMERICAN COLLEGE AND UNIVERSITY PRESIDENTS' CLIMATE COMMITMENT

Signatories of the Presidents' Climate Commitment commit their institutions to developing a comprehensive plan to achieve climate neutrality as soon as possible by taking the following five steps:

- 1. Within two months of signing the Commitment (July 15, 2008), create institutional structures to guide the development and implementation of the plan. VCU signed the Commitment effective May 15, 2008.**
- 2. Within one year (May 15, 2009) complete a comprehensive inventory of all greenhouse gas (GHG) emissions and update the inventory every year thereafter.**
- 3. Within two years (May 15, 2010) develop an institutional action plan for becoming climate neutral.**
- 4. Initiate two or more of seven tangible actions to reduce greenhouse gases while the institutional climate action plan is being developed.**
- 5. Make the climate action plan, GHG emissions inventory and periodic progress reports publicly available to AASHE for posting and dissemination.**

VCU STATEMENT OF SUSTAINABILITY

Sustainability is the goal of maintaining a good quality of life for those who presently experience it, while expanding that quality of life to those who lack it; understanding and respecting the needs of future generations and the limits of natural systems within which quality human lives are necessarily embedded and dependent.

Sustainability includes, but is not limited to:

- The recognition of threats to the climate system inherent within the continued introduction of carbon into the atmosphere by human activity, especially through carbon-based energy production and consumption; necessitating action to reduce human carbon footprints, both at the individual, community and institutional levels.**
- The identification and reduction of negative impacts from human activity upon human health (e.g., air and water pollution, other exposures to hazardous substances — both long-term and immediate, stress impacts, etc.).**

VCU STATEMENT OF SUSTAINABILITY

Continued

- The identification and reduction of negative impacts from human activity upon ecosystem health (e.g., lost habitat, biodiversity, ecosystem function, etc.).
- The recognition of the finite nature of our resource base; necessitating the reduction, reuse and recycling of materials, the identification and development of renewable resources, and increased efficiency in our use of all resources.
- On-going dialogue among experts, lay-people, leaders and citizens for the purpose of learning more about the nature of these challenges, both from a technical and a human value-based perspective.

VCU Sustainability Committee – 7-22-09



VCU SUSTAINABILITY COMMITTEE

The VCU Sustainability Committee has been instituted as part of the VCU commitment to the American College and University Presidents' Climate Commitment that then-President Eugene Trani signed in April 2008.

The mission of the Committee is to draft the VCU Climate Action Plan by May 2010 in accordance with the Presidents' Climate Commitment.

The VCU Sustainability Committee consists of 43 members representing most constituencies of the university community. Students, faculty and staff serve on the Committee that reports to the President of the University.

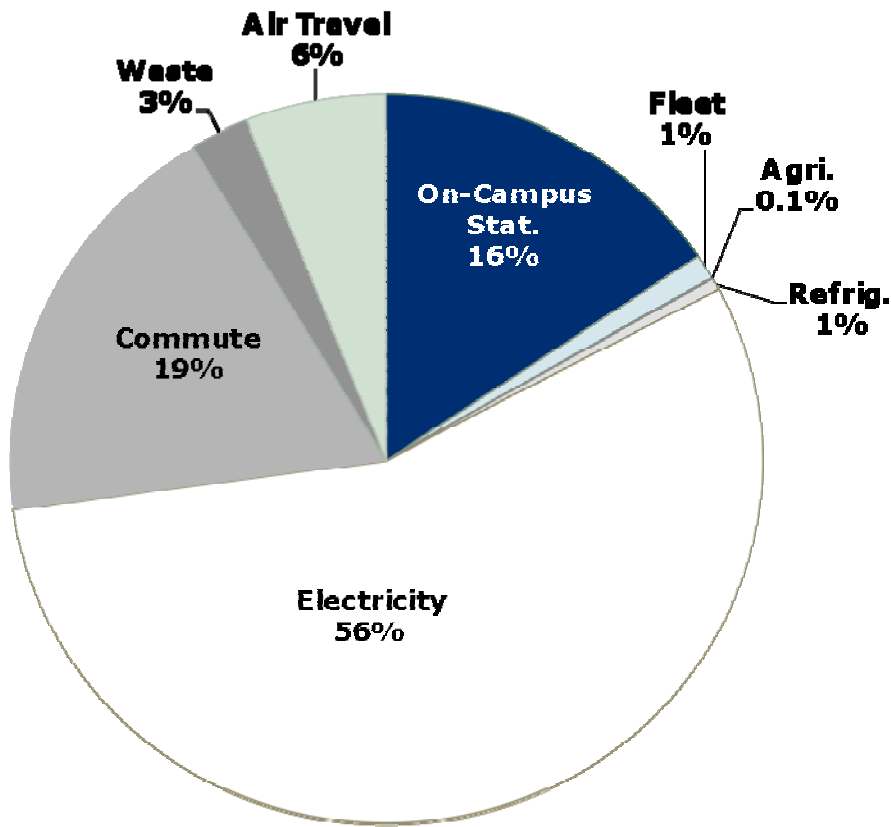
The VCU Sustainability Committee has four subcommittees.

- *Administration Subcommittee*
- *Climate Action Plan Subcommittee*
- *Education, Research and Community Engagement Subcommittee*
- *Waste, Foodservice and Transportation Subcommittee*

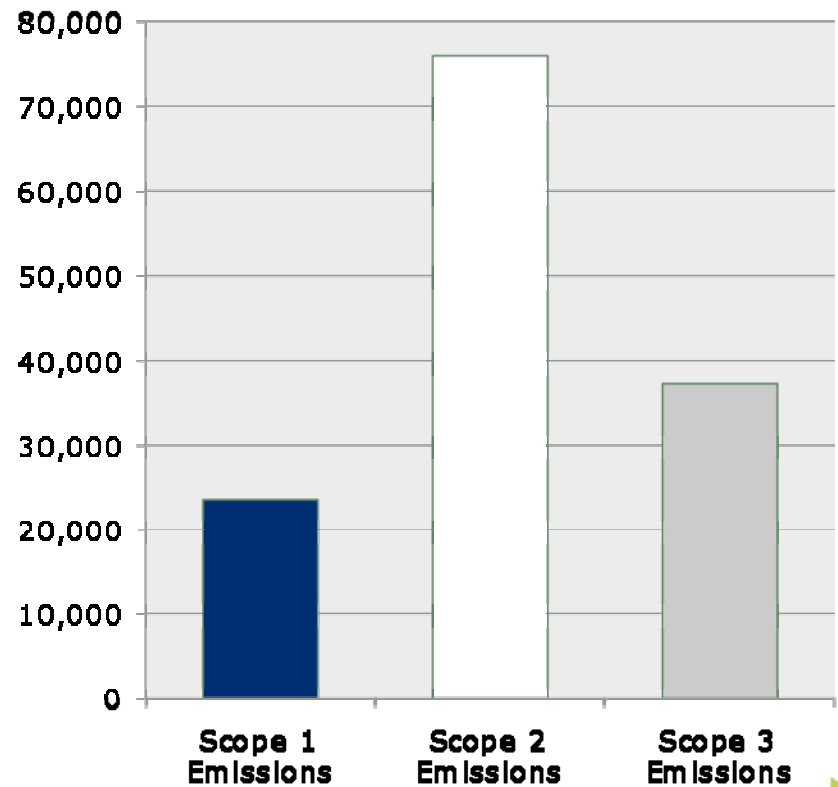
VCU GREENHOUSE GAS EMISSIONS INVENTORY

Total Carbon Emissions 136,775 MTeCO₂ in FY2008

Carbon Emissions by Type



Carbon Emissions by Scope



GREENHOUSE GAS EMISSIONS EQUIVALENCIES

136,775 MTeCO₂ is equivalent to:

- Annual GHG emissions from 25,050 passenger vehicles
- CO₂ emissions from 15,524,972 gallons of gasoline consumed
- CO₂ emissions from 318,081 barrels of oil consumed
- CO₂ emissions from burning 714 railcars' worth of coal
- CO₂ emissions from the electricity use of 18,970 homes for one year

VCU GREEN REPORT CARD

The College Sustainability Report Card issued by the Sustainable Endowments Institute

	2008	2009	2010
Administration	D	B	A
Climate Change & Energy	D	B	A
Food & Recycling	C	B	A
Green Building	B	B	B
Student Involvement	-	B	B
Transportation	B	B	B
Endowment Transparency	C	A	A
Investment Priorities	C	C	B
Shareholder Engagement	F	F	F
Overall Grade	C-	B-	B

RECENT PROJECTS



VCU SUSTAINABILITY CONTACT

Director of Sustainability

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MCV Campus

Physical Plant Administration Building

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804-628-5199

jghosh@vcu.edu

VCU Sustainability: www.vcugoesgreen.vcu.edu

VCU Year of the Environment:

<http://www.yearofenvironment.vcu.edu>



ADMINISTRATION SUBCOMMITTEE

ED BENNETT, PE, LEED AP

Executive Director for Physical Plant
and
Deputy for Facilities Management

- Involvement of the entire campus is essential
- Need a constant across committees (Jacek)
- Quick wins (low cost/low effort) essential and the Green Report Card has helped us to find
- Celebrate successes, engage public relations
- Sustainability is good business

CLIMATE ACTION PLAN SUBCOMMITTEE

CARL BECKELHEIMER, CEM, CRM

Energy Manager

- CAP Subcommittee structure
- Designation of CAP baseline year: 2008
- Designation of CAP climate neutral year: 2050
- RFP process for CAP consultant
- Ongoing CAP planning process

EDUCATION, RESEARCH and COMMUNITY ENGAGEMENT SUBCOMMITTEE

DR. JACQUELINE McDONNOUGH

Associate Professor Science Education
Director Center for Life Science Education

- Define *sustainability*
- Obtain baseline knowledge
- Make curriculum/research/community engagement recommendations

WASTE, FOODSERVICE and TRANSPORTATION SUBCOMMITTEE

TAMARA HIGHSMITH

Dining Services Sales & Services Manager

- Cost/Technology Hurdles
 - Plastic Knife (3¢) vs. Compostable Knife (14¢)
 - Commercially available late 2008
 - Still softens with warm food
- Evolving Products
 - Compostable products
 - “Green” cleaners
- Technology
 - Pulper vs. overnight bio-degrade

ADMINISTRATION SUBCOMMITTEE

ROBERTO CELIS

Vice-President SGA

EDUCATION, RESEARCH and COMMUNITY ENGAGEMENT SUBCOMMITTEE

AMANDA SCHUTT

Green Unity 4 VCU

- Gardens for Life
- Adopt-a-Block
- Year of the Environment – student kickoff: 11/18

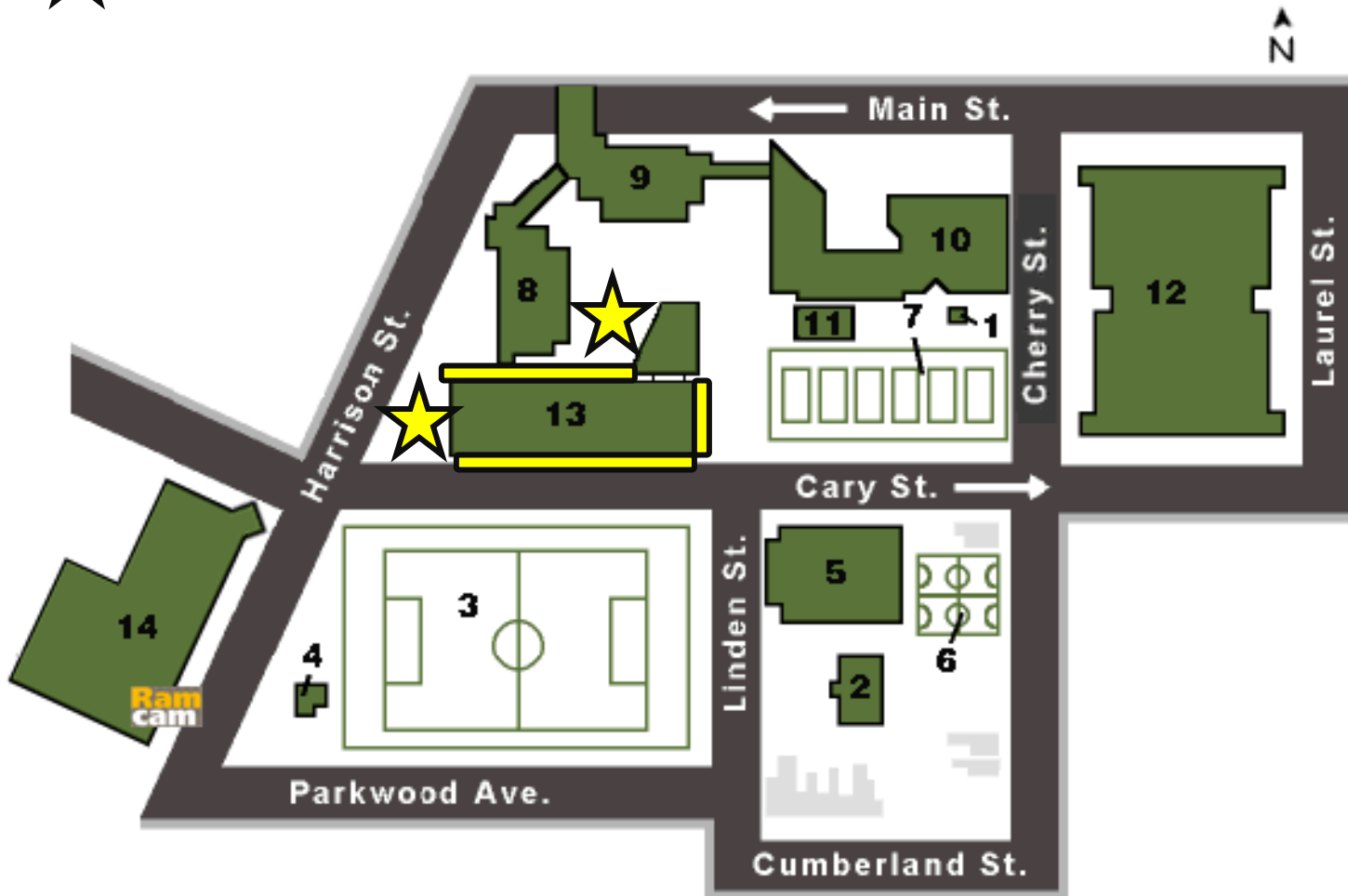
GARDENS FOR LIFE



Rain Garden



Bayscape





VCUTM

goes green

Virginia Commonwealth University