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## SUSTAINABLE COMMUNITY SNAPSHOT
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OUR HISTORY

Virginia Commonwealth University is committed to furthering sustainability in our community and on campus. VCU has been working toward a more sustainable future since 2008 when then President Eugene P. Trani signed the American Colleges and Universities Presidents’ Climate Commitment (ACUPCC). The signing of this commitment spurred VCU to create the Office of Sustainability and appoint the first Director of Sustainability in 2009.

As signatories of the ACUPCC VCU was charged with creating greenhouse gas emission reduction goals, developing a Climate Action Plan (CAP) and establishing a university-wide Sustainability Committee. VCU developed a CAP in 2010, which commits the university to reducing GHG emissions by 17% by 2025 and 100% by 2050 based on 2008 benchmark levels. Final CAP recommendations were weighted heavily towards facility operations but lacked a thorough review of sustainability in academics, engagement, and administration at VCU.

TURNING AN IDEA INTO A REALITY

In 2014, the Sustainability Committee proposed drafting a Sustainability Plan to be developed and implemented by the Office of Sustainability. This plan is intended to address areas not covered in the CAP as well as provide a more holistic vision of sustainability at VCU.

The development process for the plan was designed to be as transparent as possible by including VCU and community members input.

In February and April 2015, the Office of Sustainability held two town hall events, open to the VCU community to solicit feedback for the plan. Additionally, the office reached out to the five neighborhood associations directly impacted by VCU, which include: Carver, the Fan, Jackson Ward, Oregon Hill and Randolph, to have an open forum for community members ideas. The feedback received from the town hall events and neighborhood associations, coupled with internal expertise and budgetary restraints, informed what is within this plan.
The Sustainability Committee guides sustainability efforts at VCU. The committee is co-chaired by the Provost as well as the Vice President for Finance and Administration and is representative of faculty, staff, and students on the MCV and Monroe Park campuses. The four sections of the Sustainability Plan are based on the four subcommittees within the Sustainability Committee.

Each subcommittee has a unique sustainability focus with a collective goal of building effective partnerships to make sustainability a lasting thread in the VCU fabric.

The Sustainability Committee meets as a whole at least once per semester with more frequent meetings for each subcommittee to coordinate respective projects and initiatives. Committee members are selected in order to represent all aspects of the university community. If you are interested in joining the Sustainability Committee or learning more about how you can be involved with sustainability at VCU please contact the Office of Sustainability.
ACADEMICS + RESEARCH

The Sustainability in Academics Leadership Team was formulated in 2011. Out of that team, VCU has seen sustainability course attributes develop, a sustainability-specific denotation in the course catalogue as well as a certificate in sustainability come to fruition. This section encompasses input from Life Sciences, School of Engineering, Office of Service Learning and many other curricular and co-curricular entities.

EDUCATION IDENTITY SYSTEM

1. **Foster a student-centric sustainability education identity system.**

1.1 Develop and implement an annual concept paper and repository for concept papers, by end of FY16.

1.2 Establish and administer sustainability related scholarships and project funding through federal programs, foundations, and commercial partnerships.

1.3 Promote student driven, student initiated sustainability activities on campus. Engage and mentor student sustainability organizations.

1.4 Engage Living Learning Programs (LLPs) in sustainability efforts.

1.5 Develop and publicize exemplars of sustainable behavior. Develop videos and case studies that profile multiple facets of sustainability.

Did you know?

VCU offers 82 courses tagged with the sustainability attribute. These courses are available in several disciplines from the sciences to the arts and are intended to give students an understanding of how sustainability can be incorporated into any field of study.

* Photo courtesy of Allison Patel
LEARNING THROUGH LITERACY

2 Promote sustainability literacy through experiential learning.

2.1 Establish formal connections with VCU Community Engagement and Service Learning, by end of FY16.

2.2 Develop and maintain database of research projects in conjunction with Office of Research/Office of Sponsored Programs, by end of FY17.

2.3 Establish and develop relationships with external constituencies (e.g., companies, community organizations) to generate internship and project opportunities.

2.4 Compile and distribute information on sustainability-related community programs, both local and beyond, by end of FY18.

THE LONG TERM

3 Institutionalize sustainability as a long-term core value of VCU.

3.1 Establish a permanent position (ideally, housed within the Office of the Provost) to implement and oversee sustainability academics at VCU.

3.2 Establish a core network for trans-disciplinary sustainability interactions, by designating a contact point person for each academic unit.

3.3 Engage with a communications expert to develop and improve sustainability in academics messaging.

3.4 Develop a tiered approach to sustainability training for faculty and staff.

3.5 Establish a centralized repository with sustainability in academics resources. Develop a tiered approach to sustainability courses and programs for students.

3.6 Contact and benchmark existing sustainability in academics programs at other universities.

3.7 Develop and implement a financial support model for sustainability in academics.

WOW!

In 2012, VCU celebrated Arbor Day by planting 290 trees at the VCU Rice Rivers Center. This holds the record for the largest tree planting in VCU history.
Did you know?
During the creation of this plan, 5 neighborhood associations were asked to provide input on our goals. The Fan, Carver, Jackson Ward, Randolph and Oregon Hill have all helped create our goals, and look forward to creating a more sustainable community along with us.

STUDENT + VOLUNTEER GROUPS

4 Provide resources to better engage student groups and volunteers around sustainability.

4.1 Identify all student organizations with a sustainability focus, annually, beginning in FY16, in collaboration with University Student Commons and Activities. Meet with all student groups with a sustainability focus to educate them on university goals and provide suggested projects, beginning in FY17. Office of Sustainability will develop a system to identify projects needed for VCU, on an ongoing basis.

4.2 Create calendar/list of sustainability volunteering groups and opportunities, via the Office of Sustainability website. Collaborate with Student Affairs and Community Engagement on app-tracking system to track sustainability-focused volunteering opportunities and student group projects.

4.3 Capture the number of hours of sustainability-focused community service, on an annual basis, beginning in FY16. Increase hours by 10% on an annual basis beginning in FY17. Identify best practices to provide and track volunteer opportunities.
FACULTY + STAFF

5 Provide resources to better engage faculty and staff on sustainability within VCU and the greater Richmond community.

5.1 Determine regional sustainability priorities and share that information publicly via the Office of Sustainability website, to faculty, staff and students. VCU will actively participate in the city of Richmond’s Green City Commission and will have an ongoing presence to support city issues and regional priorities.

5.2 Create incentives for sustainable department habits and operations.

5.3 Have at least 5 offices/departments complete Green Office certification annually, beginning in FY16.

5.4 Develop incentives to participate in Green Office program. Identify the sustainability training needs of faculty and staff. Provide appropriate trainings to faculty and staff on sustainability and environmental issues, beginning in FY17.

SERVICE LEARNING

6 Provide resources to better engage students about sustainability within academics.

6.1 Establish a baseline number of students enrolled in Service Learning courses that have a sustainability focus, by end of FY16. Increase the number of students enrolled in sustainability-focused Service Learning courses by 5% annually, based on established baseline, beginning in FY17.

6.2 Determine the number of faculty who teach sustainability focused Service Learning courses, by end of FY16. Provide resources, assistance and incentives for faculty to create Service-Learning courses as well as infuse Service-Learning principles into their existing courses, by end of FY16.
**OPERATIONS**

The Operations subcommittee is co-chaired by the Assistant Director of Facilities and Conference within University Housing as well as VCU’s Dining Services Manager. This unique pairing allowed creativity to flow freely throughout this section of the Sustainability Plan. Expertise from Utilities and Engineering, the department of Urban Planning and Design, the Office of Sustainability as well as Library Services informed much of this section. Highlights include reductions in water consumption, energy consumption, waste generation and single occupancy vehicle usage.

**WATER USAGE**

7 Reduce water consumption.

7.1 Upgrade water fixtures in all areas where appropriate to conserve water by end of FY20. In partnership with the Planning and Administration subcommittee develop and implement education programs for faculty, staff and students to increase water conservation by end of FY16.

7.2 Evaluate new technologies and methodologies for reducing water consumption and build them into the plan as practical.

8 Reduce water requiring treatment from VCU facilities.

8.1 Through a feasibility study, develop a storm water management plan that reduces the impact on the James River watershed. Investigate increased use of native plants and sustainable grounds management where feasible.

**ENERGY USE + EFFICIENCY**

9 Reduce energy use and increase energy efficiency.

9.1 Upgrade lighting to best available technology in all feasible areas as lighting systems are replaced or installed. Install motion detectors in all appropriate areas by end of FY20. Also, investigate departmental metering of electricity use to encourage increased conservation.

9.2 In partnership with the Planning and Administration subcommittee, develop and implement education programs for faculty, staff and students to influence positive behavior change to conserve energy by 6/30/2016.

9.3 Evaluate new technologies and methodologies for reducing energy consumption and build them into the plan as practical.

10 Increase energy efficiency education programs.

10.1 Increase utilization of building automation systems where appropriate to increase energy efficiency. Design and implement best practices for all VCU facilities to conserve energy.
SOLID WASTE

11 Reduce solid waste generation.

11.1 Reduce solid waste by 3% each year and increase waste diversion by 3% each calendar year from 2016 - 2020, using the 2014 diversion rate as a baseline.

11.2 In partnership with the Planning and Administrative subcommittee, develop and implement education programs for faculty, staff and students on single stream recycling and other waste reduction programs.

12 Increase waste diversion rate.

12.1 Increase diversion rate by encouraging reuse over resale, resale over recycling and recycling over landfill disposal. Look at the feasibility of diverting pre- and post- consumer waste from dining areas on campus to increase waste diversion.

12.2 Evaluate new technologies and methodologies for increasing waste diversion and build them into the plan as practical.

TRANSPORTATION

13 Reduce single-occupancy vehicle usage.

13.1 Develop university-wide policies to reduce parking demand and single occupant vehicle usage.

13.2 Fully implement a bike share program, university-wide.

13.3 Develop parking policies that balance the parking demand throughout the campus, maximizing parking in underutilized facilities through better aligned parking facilities with transit options.

13.4 Promote safe corridors for alternative modes of transportation including but not limited to cyclists and pedestrians, further reducing single occupancy vehicle travel.

13.5 Promote and expand VCU’s transit network by strengthening existing partnership with GRTC as well as better integrating systems considering pending implementation of Bus Rapid Transit (BRT).

13.6 Strengthen and expand bicycle infrastructure for bike commuters, including additional bike racks, bike lockers, and bike shelters.

14 Reduce unnecessary vehicle usage at VCU university-wide.

14.1 Develop university-wide policies to promote the use of alternative transportation methods through intracampus travel.

14.2 Reduce the size of the fleet and increase fuel efficiency, university-wide.

14.3 Consider opportunities for shared vehicle utilization through the development of a motor pool with a departmental online reservation system.

14.4 Implement anti-idling policy for all VCU-owned vehicles.

14.5 Implement preventative maintenance program for university fleet, to extend vehicular life.

14.6 Continue to work to infuse alternative fuel vehicles into the university fleet.
There is a green roof on top of the VCU Pollak Building! Benefits include: reducing storm water flow, energy use, and creating a new habitat for insects and birds!
THE MORE YOU KNOW

Check out how much water, electricity, and natural gas VCU consumed during the fiscal year of 2015. Only with your help can we reduce our resource use.

EVEN DAY COMPARISONS

Charging your laptop
2,484,744 times

Charging your phone
84,355 times

178.9MM

electric (KWH)

PUT INTO PERSPECTIVE

Taking 13,497 showers
(25 gallons/10 minute shower)

Brushing your teeth 84,355 times
(2 gallons/minute brushing teeth)

337.4K

water (MGAL)

WHAT THIS MEANS

Heating 46 buildings
equivalent to Brandt Hall
(for one whole year)

Heating + cooking in the
Student Commons for 47 years

292.2K

natural gas (MCF)

In contrast, during 2014 we generated 7,671,864 pounds of waste. Of that 6,002,784 pounds of waste was landfilled and 1,700,270 pounds were recycled as part of the single stream recycling program.

* Stats from EPA Water Sense, Forbes.com, and Virginia Commonwealth University
EDUCATIONAL PROGRAMS

15
Develop and implement education programs for the VCU community on energy and water conservation and waste reduction.

15.1 Assess and document existing educational programs and materials by the end of FY16.

15.2 Mobilize key partners such as SGA, Staff Senate, Faculty Senate and student organizations to enhance communication across the VCU community. Complete by the end of March, 2016.

15.3 Audit peer institutions as identified by AASHE to assess successful communication practices that may serve as examples for VCU. Complete by December, 2016.

15.4 Develop a digital marketing plan targeting energy and water conservation as well as waste reduction by the end of December, 2016.

15.5 Pilot test marketing plan with previously identified key partners in the spring semester of 2017.

15.6 Implement digital marketing and communication around energy, waste and water in the fall semester of 2017.

15.7 Leverage online analytics to track usage of online materials and inform where improvements or changes need to be made.
STUDENT WORKER PAY RATE

16
Explore the feasibility of increasing pay for student workers at VCU.

16.1 Assess worker pay for other businesses near VCU with high percentages of VCU student employees.

16.2 Assess student pay within VCU currently and within the past five years. Key partners include Human Resources, Career Services, Rec Sports, VCU Housing and Student Affairs.

16.3 Compile findings and make recommendations in a final report.

VCU LEARNING GARDENS

17
Increase student and community engagement with the VCU Learning Gardens Program to promote healthy, sustainable eating habits.

17.1 Promote volunteerism at the gardens among faculty and staff through the use of community service leave.

17.2 Promote local and sustainable food options available within Richmond to the VCU community.

17.3 Serve as marketing arm for VCU Learning Gardens Program.

RAMBIKES

Have a flat tire? Chain pop off the tracks? RamBikes can fix it! RamBikes is VCU’s student run bike shop open to all students, faculty, and staff. Whether you need free bike repair, advice on cycling in the city, recommendations for local shops, or just want to meet some bike-fanatics like yourself, you are welcome to come on by. The RamBikes staff will always be excited to see you!

WATER BOTTLE STATIONS

At VCU, 33 of the most active buildings on campus are equipped with at least one water bottle filling station. Because of these stations, and the environmentally conscious students, faculty, and staff, the university has saved over 1 million plastic water bottles each year since 2010.
SPOTLIGHT ON

LEARNING GARDENS PROGRAM

The Learning Gardens Program at VCU aims to provide fresh produce to the VCU and surrounding community as well as create learning opportunities around growing food. Through this program, VCU is committed to enriching the Richmond community by supporting access to healthy food as well as education around how healthy food can be grown and prepared.

TOTAL SERVINGS DONATED: 1,795

TOTAL POUNDS DONATED: 150
Currently, the Learning Garden Program consists of two gardens and several partners within both the VCU and Richmond communities.

The first garden, located on the MCV campus, was built in 2012 on the east side of the Larrick Student Center. It provides space for any student, staff, or faculty at VCU to rent their own plot and grow their own produce.

This garden supports twelve raised beds with over 1,300 square feet of combined growing space. Ten beds are divided among more than twenty garden members for growing food and flowers for personal use. Two beds are managed by the Learning Garden Coordinator and dedicated to growing produce for donation to the VCU Ram Pantry (the VCU food pantry for low income staff, faculty, and students) as well as the Center for High Blood Pressure.

The second garden is located on the Monroe Park Campus and is focused on providing experiential learning opportunities for VCU students and Richmond community members around growing and accessing healthy food as well as growing a high volume of healthy, fresh produce for donation. There are no plots for rent in this garden.

Instead, a heavy focus is placed on maximizing its 1200 square footprint for high production of fruits and vegetables for donation to those in need. There is a heavy reliance on volunteers for this mission to succeed which provides excellent and ample opportunity for learning.

This garden has been designed to utilize sustainable methods for high-output crop products and all available growing space, for maximum yield.

**WOW!**

From July 2015 to November 2015 our two 15’ x 8’ foot beds generated 150 pounds of produce for donation, and almost 1,800 servings of vegetables!
ACKNOWLEDGMENTS

ACADEMICS AND RESEARCH SUBCOMMITTEE

CO-CHAIR: Cliff Fox, Associate Director, Affiliate Professor, Center for Environmental Studies

CO-CHAIR: Stephen Fong, Associate Professor, Chemical and Life Science Engineering

Nicole Anderson-Ellis, Focused Inquiry, Assistant Professor

Jaime Baird, Director of Administration, Institute for Contemporary Art

Bonnie Brown, Professor, Biology

Laura Chessin, Associate Professor, Graphic Design

Jennifer Ciminelli, Rice Rivers Center Data Manager, Center for Environmental Studies

Deirdre Condit, Political Science, Associate Professor

Rodney Dyer, Associate Professor, Biology

William Godfrey, Adjunct Professor, Center for Environmental Studies

Carolyn Hawley, Assistant Professor, Rehabilitation Counseling

Candace Johnson, Assistant Professor, Family and Community Health Nursing

Susan Johnson, Clinical Assistant Professor, Adult Health and Nursing Systems

Lemont Kier, Affiliate Professor, School of Pharmacy

Gary Matzke, Associate Professor, Program Director, School of Pharmacy

Leticia Moczygemba, Associate Professor, School of Pharmacy

Lisa Phipps, Online Learning Innovation Liaison, ALT Lab

Michael Pitts, Associate Professor, School of Business

John Powers, Associate Professor, Department of History

Faye Prichard, Director of Writing, Assessment and Evaluation, Honors College

Molly Ransone, Assistant Director, Learning Media Innovation

Maura Scanlon, Director of Communications, Institute for Contemporary Art

Jon-Phillip Sheridan, Administrative Director, Photography

Leonard Smock, Interim Vice Provost for Life Sciences

Jacqueline Smith-Mason, Associate Dean, Honors College

Jennifer Stewart, Director of Graduate Studies, Department of Biology

Mark Wood, Director, School of World Studies

Van Wood, Professor, School of Business

COMMUNITY ENGAGEMENT SUBCOMMITTEE

CHAIR: Catherine Howard, Vice Provost, Division of Community Engagement

Megan Gough, Assistant Professor, Wilder School of Government and Public Affairs

Jody Davis, Associate Professor, Psychology

Jason Levy, Associate Professor, Wilder School of Government and Public Affairs

Christina Lindholm, Associate Dean of Curriculum and Assessment, School of the Arts

Jacqueline McDonnough, Associate Professor, School of Education

Michael Newsome, Assistant Vice President for Research

Lynn Pelco, Associate Vice Provost, Division of Community Engagement

NEIGHBORHOOD ASSOCIATIONS

CACIL Neighborhood Association

Randolph Neighborhood Association

Oregon Hill Neighborhood Association

The Fan Neighborhood Association

RESIDENTS FROM: Church Hill, Jackson Ward, Bryd Park, Edgehill, Scott's Addition, Woodland Heights, Westover Hills, Union Hill and Reedy Creek
PLANNING AND ADMINISTRATION SUBCOMMITTEE

CO-CHAIR: Katherine Vatalaro Hill, Assistant Director, Student Wellness Center, Student Affairs
Yolanda Avent, Director, Office of Multicultural Student Affairs
Cathleen Burke, Assistant Vice President, Human Resources
Gregory Council, Employee Relations Specialist, Human Resources
Idella Glenn, Vice President for Inclusive Excellence

Jeanne Hammer, Associate University Librarian for Administration
Barbara Judy, Director of Degree Audit Operations, Records and Registration
Sam Kennedy, Deputy Director, User Services, Technology Services
Brenda Mowen, Director, Procurement Services
Diane Reynolds, Assistant Vice President, Business Services

Katherine Rosemond, Executive Director, Resources and Planning, Health Sciences
Matthew Ruland, Police Sargent, VCU Police
Megan Schmidt, Social Media Coordinator, University Public Affairs

OPERATIONS SUBCOMMITTEE

CO-CHAIR: Tamara Highsmith, Dining Services Manager
CO-CHAIR: Allison Patel, Assistant Director of Operations, Residential Life and Housing
Carrie Baines, Recreational Sports
John Baker, Chemistry
Carl Beckleheimer, Energy Manager
David Cooper, Director of Facilities Services
William Cramer, Assistant Director of Facilities, Student Commons
Dinkus Deane, Director of Operations, Fine Arts

Miriam Foster, Transit Specialist, Parking and Transportation
Adam Gull, Program Analyst, Parking and Transportation
Meredith Hawkins, Associate Director, Recreational Sports
Alexander Henson, Chief Information Officer, Technology Services
Margaret Kelland, Monroe Park Campus Coordinator
Pamela Mason, Administrative Assistant, Biomedical Engineering

Damian Pitt, Assistant Professor, Wilder School
Carl Purdin, Assistant Director of Design, Facilities
Michael Risley, Energy Manager, Physical Plant
Paul Thrift, Superintendent of Grounds, Physical Plant
Camden Whitehead, Associate Professor, Interior Design
Angela Worris, Electronic Serials Specialist, Library

OFFICE OF SUSTAINABILITY STAFF

Erin Stanforth, Director of Sustainability
Wyatt Carpenter, Sustainability Program and Projects Coordinator, Staff Support to Academics and Research and Planning and Administration subcommittees; Co-chair of Planning and Administration
Steve Heinitz, Sustainability Program and Projects Coordinator, Staff Support to Operations subcommittee

Parker Long, Sustainability Reporting and Outreach Coordinator, Staff Support to Community Engagement subcommittee
Hasan Alkhairo, Sustainability Intern, Center for the Study of Biological Complexity, 2016
Kerrie Harlow, Sustainability Intern, School of the Arts, 2016

Nikita Jathan, Sustainability Intern, Center for Environmental Studies, 2014
Erika Johnson, Sustainability Intern, School of the Arts, 2015
Leah Schmidt, Sustainability Intern, School of the Arts, 2014
SUMMARY

5 NEIGHBORHOOD ASSOCIATIONS
aided in the creation of this plan to foster a more sustainable community

JACKSON WARD
CARVER
OREGON HILL
THE FAN
RANDOLPH

2016
2020

SUSTAINABILITY SNAPSHOT

82 COURSES
currently offered at VCU are tagged with the SUSTAINABILITY ATTRIBUTE

33 buildings on campus are equipped with 1 or more WATER BOTTLE FILLING STATIONS - this has saved over 1 MILLION water bottles from landfill each year since 2010

3% Aim to increase the total amount of waste diverted each year * by 2020

APPROXIMATELY 2,300 STUDENTS
were awarded work-study for the academic year of 2015 - 2016. Exciting job opportunities exist both on and off campus in a variety of fields

LEED CERTIFICATIONS
16 certified buildings between both academic campuses
9 building projects in progress or in planning

2 MILLION square feet of LEED certified building space to be constructed by the end of 2017

2 LEARNING GARDENS

22 RAISED GARDEN BEDS

1,700,270 POUNDS
of all university waste is diverted and recycled as a part of VCU’s single stream program

2,000 POUNDS RECYCLED TEXTILE
since 2010, from the VCU Department of Fashion Design

ALL DAIRY SOURCED LOCALLY
All dairy and tofu purchased by VCU Dining Services is local. Depending on seasonality and availability, VCU purchases from at least 8 local farms throughout the course of a year

LEED

To learn more, please visit www.sustainability.vcu.edu or email us at sustain@vcu.edu