

# UDC's Van Ness Campus Eco-District

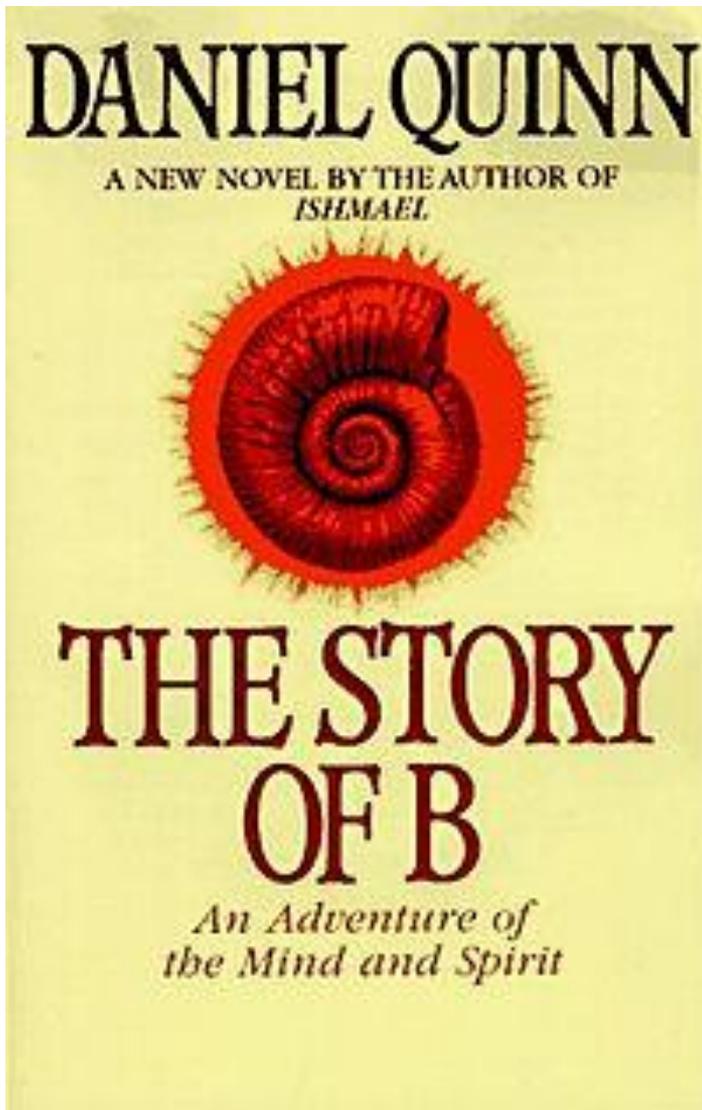
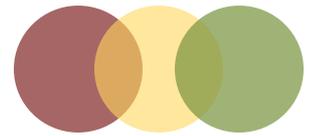
MWCOG IGBG | November 8, 2012

Josh Lasky, LEED AP+

Assistant Director for Sustainability Education

College of Agriculture, Urban Sustainability, and Environmental Sciences

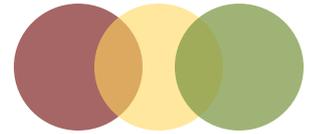
# Vision vs. Programs



“If the world is saved, **it will be saved by people with changed minds, people with a new vision.** It will not be saved by people with old minds and new programs. It will not be saved by people with the old vision but a new program. Recycling is a program. Supporting earth-friendly legislation is a program. You don’t need a new vision to engage in either of these programs.”

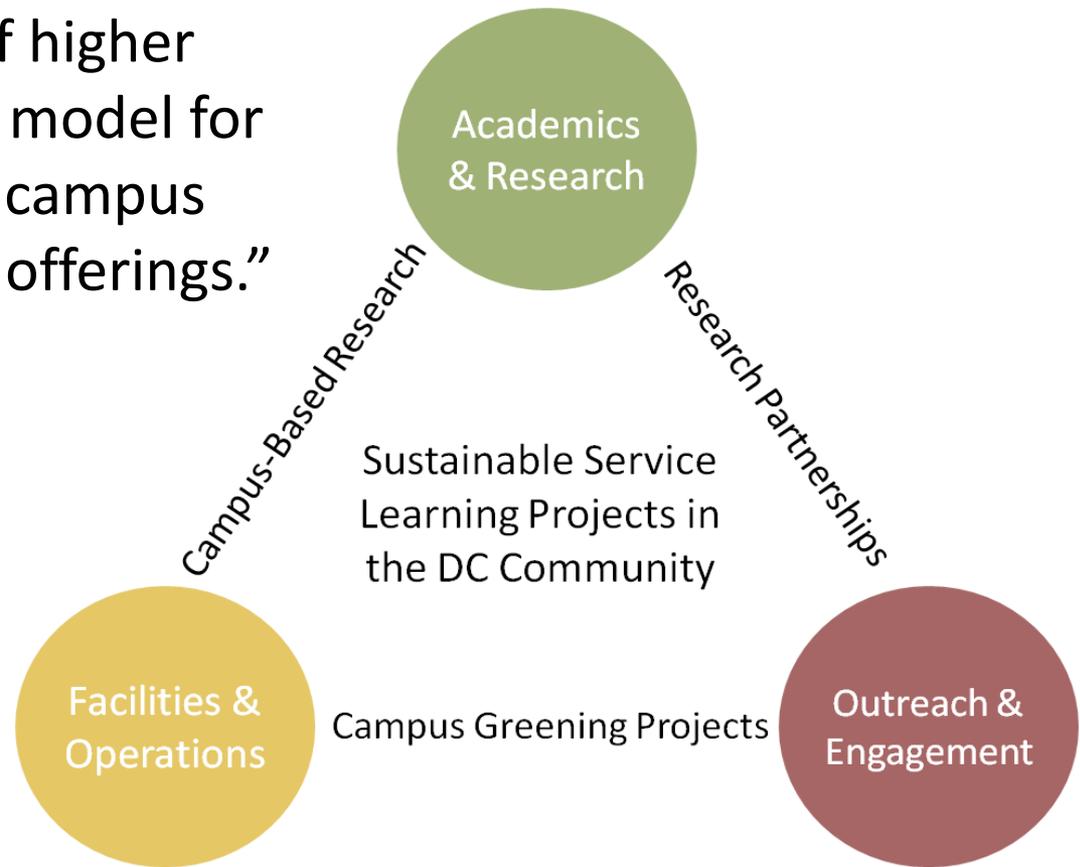
Daniel Quinn, *The Story of B*

# UDC's Sustainability Vision



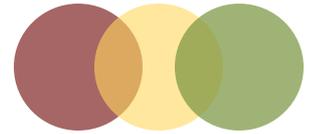
“UDC will serve as a sustainability leader among institutions of higher education and as a national model for urban sustainability in both campus operations and educational offerings.”

*Dr. Allen L. Sessoms*



# Existing Conditions

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**\$300,000,000** in deferred maintenance

**1976** was the last year new building construction occurred

**90 degrees** was the recorded temperature in Susan's office on March 23

**93%** of the 21-acre Van Ness Campus is impervious cover

**13%** was the waste diversion rate for week 1 of RecycleMania, February 2011

**Never** had buildings been benchmarked for energy and water consumption



udc.edu

Rose Garden

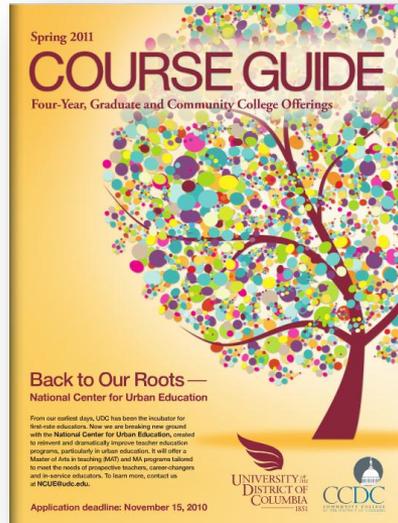
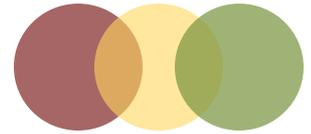






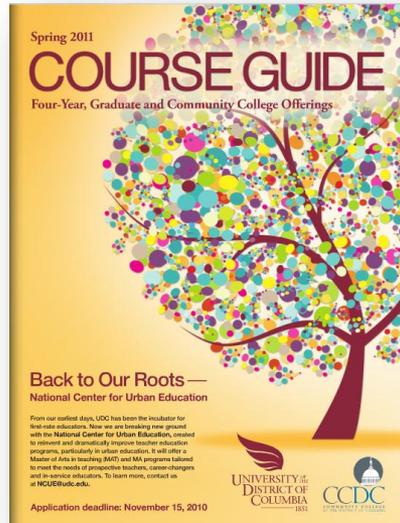
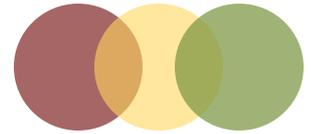


# Creating Healthy Disruption



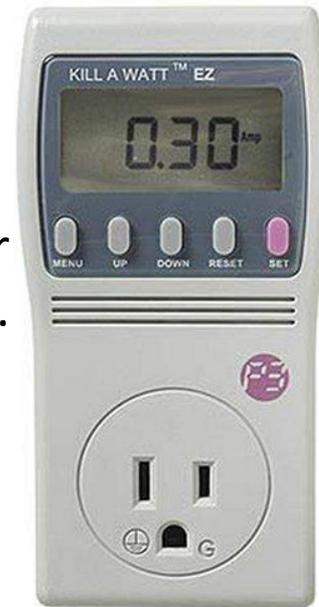
Enough paper every year to cover the Washington Monument 411 times.

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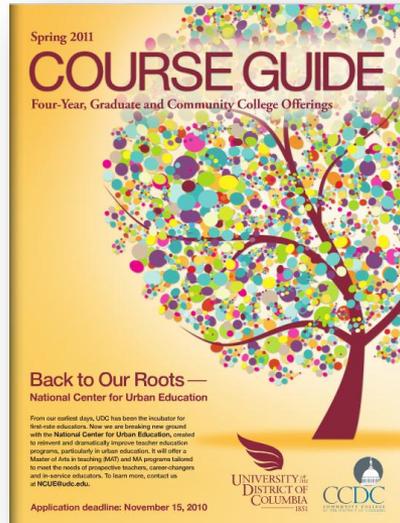
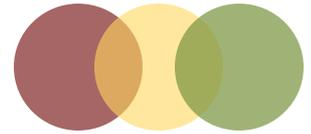


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The watt meter is mightier than the sword.

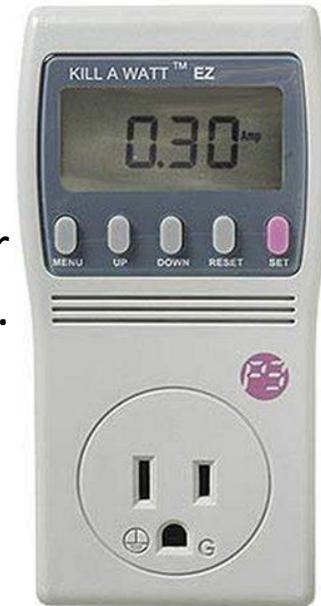


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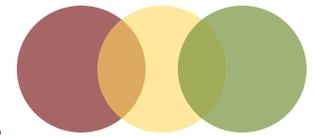
The watt meter is mightier than the sword.



(actual size)

# UDC's Sustainability Outcomes

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Aug 2010	UDC Sustainability Initiative is launched
Oct 2010	University Sustainability Task Force commissioned by POTU
Apr 2011	begin sourcing 50% of electricity from wind
May 2011	published first sustainability strategic plan
Aug 2011	campus master plan (w/ sustainability chapter) approved
Sep 2011	reached a monthly waste diversion rate of 40%
Jan 2011	broke ground on LEED Platinum student center
Feb 2012	earned STARS Bronze
Feb 2012	signed DC College and University Sustainability Pledge
May 2012	established Center for Sustainable Development
Sep 2012	hosted fourth annual Green Living Expo at UDC

## Participating in STARS

**STARS Bronze** In an effort to promote more sustainable practices and track our progress, UDC registered as a Charter Participant of the Sustainability Tracking, Assessment and Rating System (STARS) and earned a Bronze rating in our first-ever submission. Details available online at [stars.aashe.org](http://stars.aashe.org).

**Dennard Plaza Deck** The \$12-million project features 90,000 square feet of new green roof space (above the parking garage), stormwater collection cisterns with a combined capacity of 18,000-gallons, and a new fountain, which reuses captured rainwater.

**Invasive Species Removal** Students and faculty have worked with UDC Extension Agents to remove a variety of invasive plant species found on campus including kudzu and Japanese honeysuckle.

**David A. Clarke School of Law** 52

**Soapstone Valley Creek** UDC has hosted numerous clean-ups to promote the health of our neighborhood ecosystem. Faculty regularly use nearby trails as outdoor classrooms.

**Low-Impact Development** Students in the Anacostia Watershed Stewards Academy installed a conservation landscape, replacing turf grass, to promote infiltration and reduce stormwater runoff.

**Recycling Center** Van Ness Campus diverts roughly 35-40% percent of waste from landfill.

**Commercial Kitchens** UDC is currently designing a series of commercial-grade kitchens to enhance our work in nutrition outreach, safety training, canning and preservation, and cooking demonstration.

**Campus Gardens** A recently founded Garden Club aims to educate students and engage the broader community in the repurposing of underutilized outdoor space on campus.

**College of Agriculture, Urban Sustainability, and Environmental Sciences (CAUSES)** UDC's newest school opened its doors in fall of 2010, home to a brand new Professional Science Master's in Water Resources Management and UDC's Land-Grant Programs.

**Site of LEED Platinum Student Center** Scheduled for completion in 2013, the \$40-million project will be the first LEED Platinum student center in the country and will utilize geothermal heating and cooling.

Updated Nov. 2012

### Efficient Operations

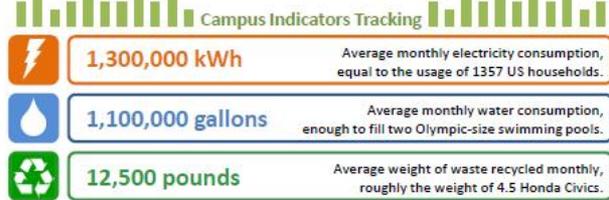
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- Future Big Belly Solar Trash and Recycling Compactors operate entirely off the grid and require five times fewer pickups by service staff, helping to reduce costs.
- Sav-Watt Eco Pole provides street lighting via long-lasting, energy efficient LED bulbs generated by two photovoltaic solar panels and a vertical-axis wind turbine.
- Brita Hydration Stations installed at 24 locations in 8 buildings provide quick, easy access to filtered tap water at no cost to students, faculty, staff, and visitors. UDC is also a member of the Tap It network, working to promote public access to campus drinking water. More info at [www.tapitwater.com](http://www.tapitwater.com).

### Sustainability Research

- EPA-Certified Environmental Quality Lab will serve as DC's primary modeling and simulation facility, managed by UDC's Water Resources Research Institute.
- Zero Energy Research Center is led by UDC's Center for Excellence in Renewable Energy and generates 100% of its electrical need from solar and wind power.
- Planned Green Roof Sites will be developed in partnership with the District Department of the Environment to study the performance of various green roof design types. A rooftop greenhouse will be established for aquaponics research.

### Intermodal Transit

- Van Ness-UDC Metro Station transports more than 57% of commuters living and working within a half-mile of the station (for 7,215 residents and 6,334 employees).
- Van Ness Metro / UDC Capital Bikeshare Station is part of a network of over 1,100 bikes at 110 stations all over the District of Columbia and Arlington.
- Zipcars at Connecticut and Windom are two of eight car-sharing vehicles located within a half-mile of the Van Ness Campus.
- WMATA Bus Lines make stops at six locations at the edge of the Van Ness Campus along Connecticut Avenue and Van Ness Street.
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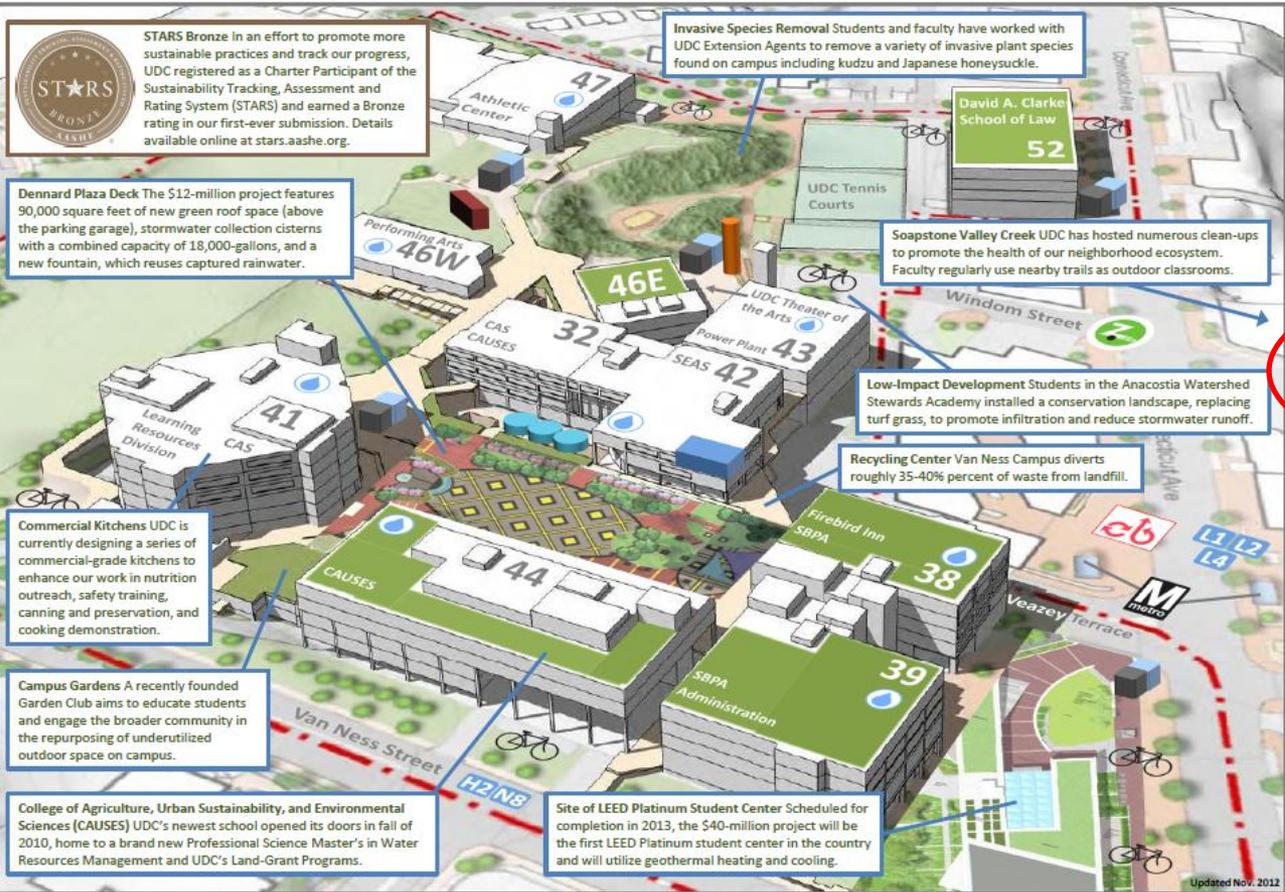
[udc.edu/sustainability](http://udc.edu/sustainability)

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 4sq: UDC Sustainability Tour

# Establishing research facilities



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### Campus Indicators Tracking

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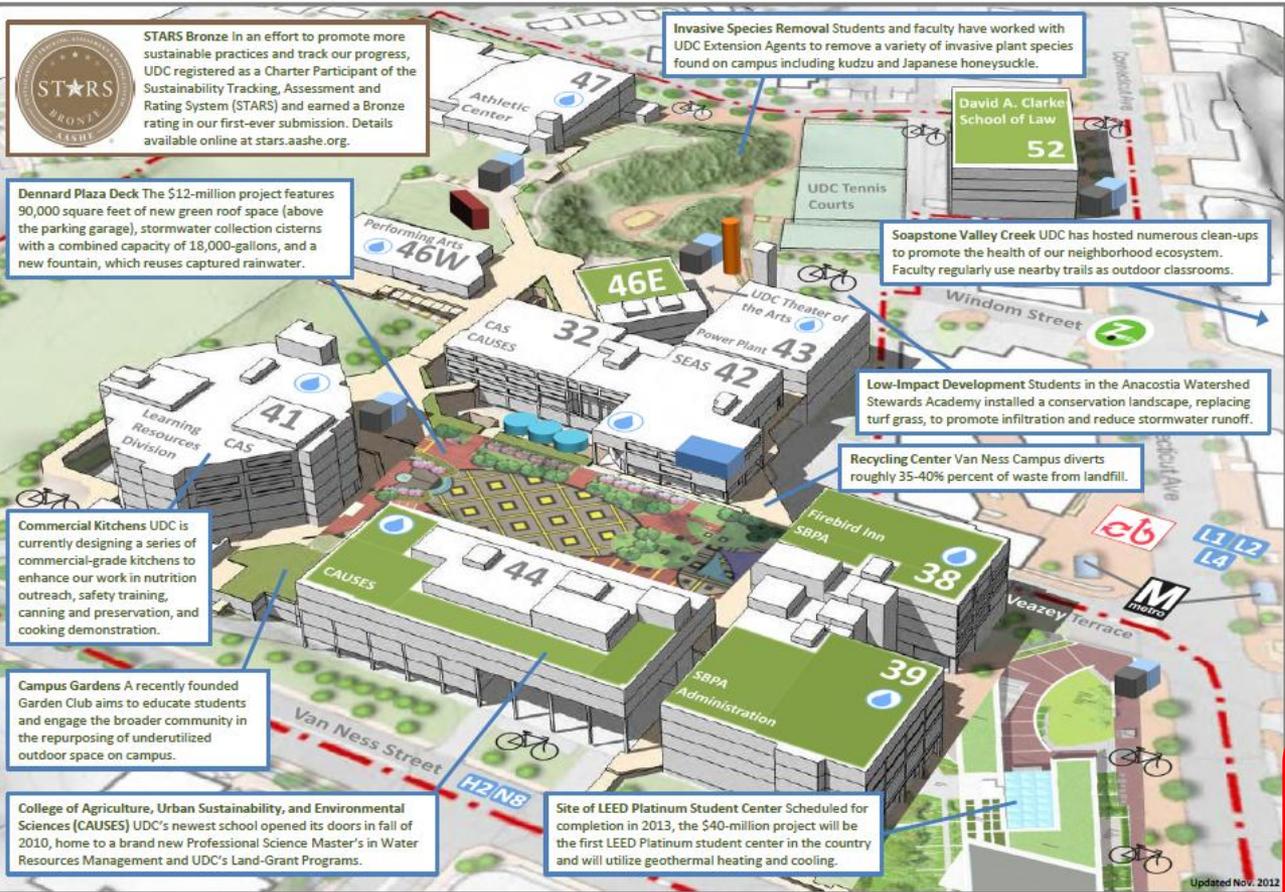
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Creating a model for sustainable design and operations



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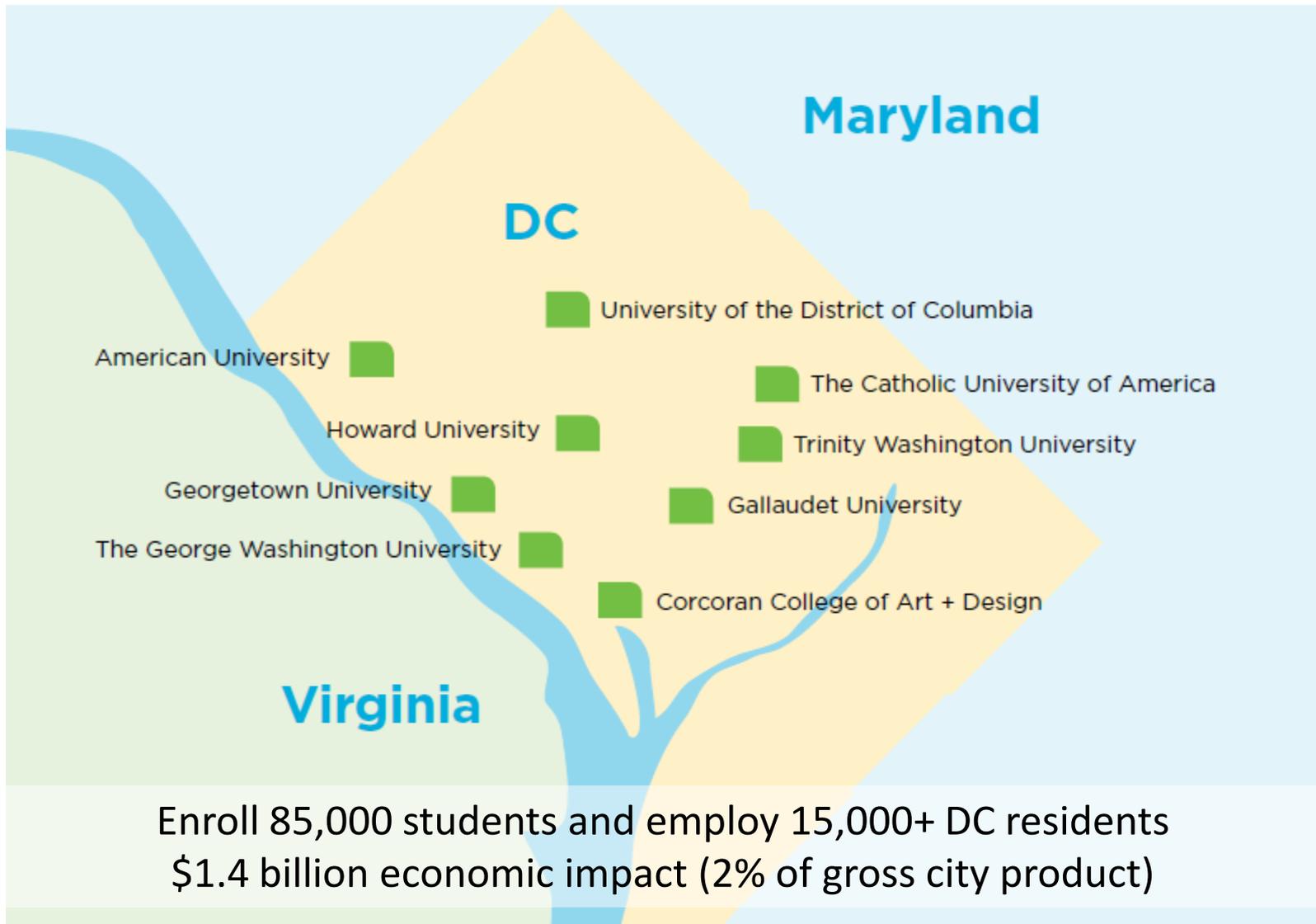
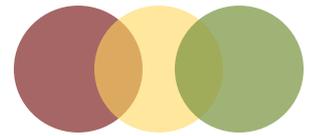
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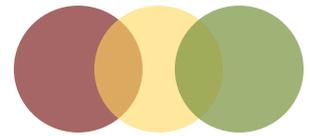
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Creating a model for sustainable design and operations

# Collective Impact



# College and Univ. Sustainability Pledge



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*District of Columbia  
 Mayor's College and University  
 Sustainability Pledge*

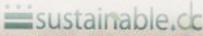
WHEREAS, the Government of the District of Columbia is committed to protecting public health and the natural environment in the city through numerous programs and initiatives; and

WHEREAS, Mayor Vincent C. Gray has designated advancing sustainability in the District of Columbia as a top priority and has designated the District of Columbia the most sustainable District of Columbia;

WHEREAS, the District's colleges and universities and the Government of the District of Columbia recognize the importance of promoting sustainability practices that optimize social, environmental, and economic benefits; and

WHEREAS, the colleges and universities in the District of Columbia are committed to creating a future that sustains a thriving natural resource system to support the human population now and for generations to come; and

WHEREAS, the colleges and universities in the District of Columbia are collectively committed to making the District the Greenest College Town in America:


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**CUSP COMMITMENTS**

CUSP signatories shall be eligible to earn up to three Green Stars in recognition of their achievements, one star for each five measures achieved.

**Energy & Buildings**

- Achieve LEED \_\_\_\_ or equivalent in all new construction and major renovations
- Achieve LEED Certification or equivalent for \_\_\_\_% of existing building square footage
- Reduce energy use in buildings by \_\_\_\_% per square foot, compared to \_\_\_\_ baseline year
- Purchase or generate at least \_\_\_\_% of total energy consumed from renewable sources

**Jobs & Community Development**

- Employ District of Columbia residents in positions directly related to sustainability
- Provide students with sustainability-related service learning opportunities in the District

**Water**

- Reduce potable water use by \_\_\_\_% per square foot compared to \_\_\_\_ baseline year
- Reduce stormwater runoff by \_\_\_\_% compared to \_\_\_\_ baseline year
- University will use tap water in place of bottled water

**Education & Training**

- Ensure that at least \_\_\_\_% of total courses offered are sustainability-focused
- Ensure that at least \_\_\_\_% of students will be eligible to take sustainability coursework
- Include at least one sustainability course in required curriculum for all students

**Waste**

- Reduce total solid waste by \_\_\_\_% compared to \_\_\_\_ baseline year
- Improve solid waste diversion rate to at least \_\_\_\_% of total solid waste

**Research & Innovation**

- Provide institutional funding and/or administrative support for faculty who engage in sustainability-related research
- Direct at least \_\_\_\_% of internally funded-research dollars to sustainability-related project
- Host at least \_\_\_\_ major sustainability outreach event(s) annually

**Purchasing**

- Ensure that at least \_\_\_\_% of food and beverage dollars is spent on sustainable food (produced within 250 miles, Organic, Fair Trade, Food Alliance, Rainforest Alliance)
- Implement LEED compliant cleaning program, policies and procedures
- Purchase ongoing consumable and durable goods in compliance with LEED

**Grounds & Habitat**

- Utilize a four-tiered Integrated Pest Management approach for \_\_\_\_% of campus grounds
- Increase tree canopy by \_\_\_\_% compared to \_\_\_\_ baseline year
- Increase campus green space (vegetated landscape) by \_\_\_\_% compared to \_\_\_\_ baseline year

**Management & Reporting**

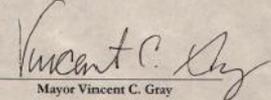
- Publish public sustainability report, including measurements of progress on CUSP goals
- Participate in CUSP working group

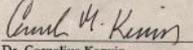
**Other**

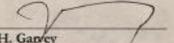
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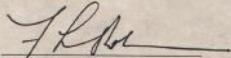
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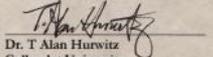

**NOW, THEREFORE,**

  
 Mayor Vincent C. Gray

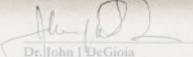
  
 Dr. Cornelius Kerwin  
 American University

  
 John H. Garvey  
 The Catholic University of America

  
 Fred Bollinger  
 Corcoran College of Art and Design

  
 Dr. T Alan Hurwitz  
 Gallaudet University

  
 Dr. Steven Knapp  
 The George Washington University

  
 Dr. John J DeGioia  
 Georgetown University

  
 Patricia A. McGuire  
 Trinity Washington University

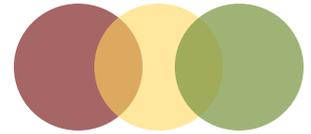
  
 Dr. Allen L. Sessoms  
 University of the District of Columbia

Hereby joins the District of Columbia Mayor's College and University Sustainability Pledge, and commits to actions and deadlines described below.

The signatories of this Pledge hereby agree to pursue and promote programs, policies and projects aimed at advancing environmental, economic and social equity in the District of Columbia. Given the current and planned innovative efforts of the higher education sector, feedback from the city's colleges and universities will be critically valuable in steering District sustainability policies and strategies.

The District government will endeavor to assist local colleges and universities in advancing new and maintaining existing programs aimed at environmental, social, and economic sustainability to meet the goals herein pledged. With the signatures below, our institutions take a bold step together in leading the District of Columbia's continued effort to become the "greenest college town in America" that will thrive in supporting its residents for generations to come.

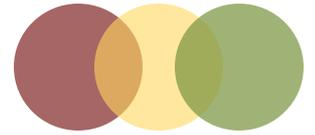
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- Community-Facing Education and Training
  - Sustainability Leadership Training Program
  - Regional Master Composter Course
- Curriculum Development
  - Public Health and Urban Sustainability (Spring 2013)
  - 25+ sustainability-focused courses, each with service components

# Where Are We Heading?

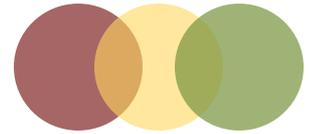
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- Energy, water, and waste neutrality
- Restorative + ecological + biophilic design
- Regional/seasonal food options
- 100% participation in sustainability education
- 100% sustainable sourcing + spending
- 100% alternative commuting
- Positive impact on community, region, world

# Contact

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