Villanova University Sustainability Initiatives

Radnor Township
Environmental Advisory Council
March 26, 2008

John Cacciola, P.E., LEED
Director of Engineering and Construction



Agenda

- 1. President's Climate Commitment
- 2. Current Initiatives on Campus
- 3. Benefits to the University



President's Climate Commitment

- Signed by over 500 Colleges and Universities
- Commitment to become "Climate Neutral"
- Greenhouse Gas Inventory (GGE)
- Plan to offset all carbon emissions

http://www.presidentsclimatecommitment.org



President's Climate Commitment

- Father Peter Donohue signed in September, 2007
- Committee in place to satisfy commitment
- GGE Inventory in progress:
 - ✓ Utility Consumption
 - ✓ Fuel usage
 - ✓ Travel / Commuting



President's Climate Commitment

- Recommended interim actions:
 - ✓ LEED Silver Buildings
 - **✓** RecycleMania
 - ✓ Investment Strategies
 - ✓ Energy Star policy
 - ✓ Public Transportation
 - ⇒Air Travel Offset
 - ⇒Renewable Energy Credits



LEED Certified Buildings

New College of Nursing and Law School Buildings

- ✓40% Reduction in water usage
- ✓ Energy Efficient HVAC and Lighting
- ✓ Thermally efficient roofing system
- ✓ Recycled content in materials
- ✓"FSC Certified" Wood Products
- ✓ Low VOC products
- ✓ Recycling construction debris
- ✓ Locally produced materials

...Pursuing SILVER on both projects...



Recycling

- Dedicated Recycling Coordinator
- One of the Leading Colleges in the State
- ■Recycled >12 Million pounds since 1990
- >25% of waste is recycled
- Recycle over 20 different products
- Participate in the Recyclemania competition

http://www.recyclemaniacs.org



Dining Services

- Organic Foods
- Sustainable Seafood Initiative
- •Fair Trade Products
- Sustainable utensils / products
- Recycling of food waste





Research Activity

- Villanova Center for the Environment
- •Green Roofing
- Solar Power



- Geothermal
- Pervious Pavements
- •Alternative Energy







Stormwater Management

•Urban Stormwater Partnership www3.villanova.edu/VUSP



- Water Resources Research
- Experiments of various pervious pavements
- ■Dr. Robert Traver:

Nationally Recognized Leader in Stormwater Management



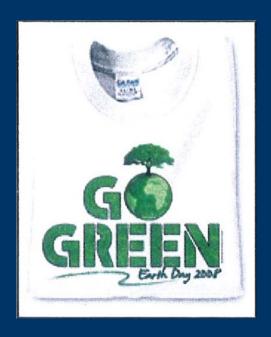


Earth Day Event

- Volunteer event held on campus each year
- Industry Speakers
- Corporate displays
- Student posters and displays
- Open to the Public

Event Info:

Thursday 4/18 and Friday 4/19





"Year of Sustainability"

- Academic Year of 2008-2009
- Joint effort between Arts & Sciences and Engineering
- Evaluate opportunities to incorporate sustainability into the curriculum
- Conferences / Symposiums / Expo
- Lecture Series
- Cross Functional



Environmental Leadership Learning Community

- Living and Learning Community
- Interdisciplinary
- Focus on texts from the Ancient to Modern period
- Students share classroom experiences
- Lectures, Films, and Community Service
- All students live in the same Residence Hall





Other Activities

- •Residence Hall Renovations "Model of Sustainability"
- Dorm Energy Competition
- **■**Commuter Benefit Plan
- Energy Star Policy
- Renewable Energy
- •Electric Cars





Benefits to the University

- Reduced Impact on the Environment
 - Collective goal of the University
 - ►Increased Awareness
- Cost Beneficial
 - ➤ Reduction in utility consumption

 Example: New Law School will use > 1 Million <u>less</u> gallons of water per year.
- Occupant health and comfort
 - ► Increased daylight in occupied spaces
 - >Increased ventilation



Questions / Comments?



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