On July 17, 2006, Charlottesville City Council unanimously passed a Resolution endorsing the *U.S. Mayors Climate Protection Agreement*. Following a July 11, 2007 presentation of the *U.S. Cool Counties Climate Stabilization Declaration*, the Albemarle County Board of Supervisors unanimously approved a Cool County Resolution on December 5, 2007.
• Concept presented to PACC Tech on Jan 15, 2009

• Steering Committee (convened Aug 2009)

• Working Groups
  1. A network of ~50 subject experts, interested parties, and staff
  2. Focused work sessions to inform Steering Committee discussion and debate

• Community Workshop

• Facilitated by City, County and UVA staff

• Presented to PACC, BOS and City Council in Aug./Sept. 2011
**LOCAL GOVERNMENT**
- David Brown, City Council
- Ann Mallek, Board of Supervisors
- Mike Osteen, Charlottesville Planning Commission
- Tom Frederick, Rivanna Water and Sewer and Solid Waste Authorities

**LOCAL BUSINESSES**
- Chris Lee, Piedmont Virginia Companies, Inc.
- Jay Willer, formerly with Blue Ridge Home Builders Association
- Tim Hulbert, Chamber of Commerce

**LOCAL NGOs**
- Bill Edgerton
  The Oak Hill Fund
- John Cruickshank
  Sierra Club, Piedmont Group
- Bill Greenleaf
  Richmond Regional Energy Alliance
- Cynthia Adams
  LEAP

**LOCAL INSTITUTIONS**
- Hank Shugart, University of Virginia, Department of Environmental Sciences
- David Neuman, University of Virginia, Office of the Architect
- Buck Kline, Virginia Department of Forestry

**Community Steering Committee**
Local Climate Action Planning Process
Steering Committee Discussion

• Political constraints on regulatory approach
• Strong, diverse community support for voluntary actions
• Existing community offers wealth of examples
• Need for local information to guide local community choices
• Many options to capture synergies that make economic and environmental sense
• Significant challenge in meeting long-term goals, but many opportunities to begin heading in that direction
• **Environmental**
  Mitigate global climate change; improve air quality

• **Financial**
  Reduce energy use, reduce emissions, reduce costs

• **Economic**
  Create green jobs, strengthen local economy

• **Infrastructure**
  Alleviate traffic, promote smart growth

• **Health**
  Improve air quality, reduce asthma rates, increase activity

• **Leadership**
  Provide model for citizens, other communities; earn recognition
Local Climate Action Planning Process

Community Workshop

RESCHEDULED
NEW DATE
FEBRUARY 24, 2011

CARBON OUR ENERGY FUTURE & YOU
a community workshop
hosted by Charlottesville, Albemarle and UVA

Thursday | February 24, 2011 | 6 – 8 pm
Materials will be on display in the Lobby all day
Albemarle County Office Building | Auditorium and Lobby
401 McIntire Road | Charlottesville
For more information, visit www.charlottesville.org/agreencity

In a typical week, how do you most often get around?
(Choose one)

76% 1. Car
5% 2. Carpool
0% 3. Bus/Trolley
7% 4. Bike
1% 5. Motorcycle/Scooter/Moped
11% 6. My own two feet
0% 7. Other

Select the top reason you would take action to shrink your energy use and carbon footprint.
(Choose one)

30% 1. Save energy; save money
5% 2. Improve air quality and health
16% 3. Improve the environment
1% 4. Increase community resiliency
19% 5. Energy independence
5% 6. Economics; boost local business; create local jobs
23% 7. Commitment to future generations

Photo: EPA Smart Growth, Flickr, 2011
Local Climate Action Planning Process

Five-Part Framework for Our Community Energy Profile

1. Energy & the Built Environment
   - Reduce Energy Demand in Existing Buildings
   - Increase Energy Efficiency Performance of New Buildings
   - Enable Building to Green Building Standards and Practices

2. Energy & Mobility
   - Focus Land Use and Transportation Planning on Density and Infill
   - Improve Travel Efficiency
   - Encourage Alternatives to Single Occupancy Vehicle Use

3. Energy Sourcing
   - Promote Adoption of Cleaner Sources of Electrical Energy
   - Promote Adoption of Cleaner Sources of Energy for Heating and Cooling
   - Promote Adoption of Hybrid, Electric and Biodiesel Vehicles and Fuels

4. Energy & Materials
   - Promote Zero Waste Principles of Waste Reduction and Minimization
   - Consider Impacts of Purchasing Decisions; Prioritize Local Procurement
   - Reuse and/or Repurpose Existing Buildings

5. Energy & the Landscape
   - Maintain Existing Tree Canopy and Forestland Base
   - Expand Forest Cover
   - Manage Existing Tree Canopy and Forests to Promote Health and Diversity

Products
Local Climate Action Planning Process
Promote Wider Awareness and Adoption of Hybrid, Electric and Biodiesel Vehicles and Fuels
- Increase availability and use of renewable fuels in vehicles
- Expand use of biodiesel and other alternative fuels in municipal vehicles and other fleets
- Develop municipal and private sector guidelines for electric vehicle charging, parking, and incentives

Geothermal Technology for Heating and Cooling
Three recently constructed facilities in Charlottesville incorporate the use of ground source (geothermal) technology. This type of heating and cooling system takes advantage of the relatively constant temperature of the Earth’s surface and reduces the energy needed to heat or cool a building. The Downtown Transit Station has 18 closed-loop, ground source geothermal wells (12 wells are 300 feet deep; 6 wells are 600 feet deep) that contribute to the energy efficiency of the building as well as eliminating noise and visual impacts of a traditional roof mounted cooling tower. The payback period for this system is estimated to be about 9.4 years and, along with other energy efficiency measures that were incorporated in this project, the building was designed to achieve a 33% energy production compared to a standard building. Both Smith Aquatic Center and the Charlottesville Area Transit also incorporate geothermal systems, using alternative approaches that offered further cost savings due increased effectiveness and reduced numbers of wells required.

Promoting Hybrid and Biodiesel Vehicles and Fuels
The purchase and use of hybrid vehicles in the Albemarle County fleet has increased over the last several years. Currently the County has 10 gas/electric hybrid vehicles in the fleet. The County has also experimented with the use of biodiesel fuel in school buses, Fire and Rescue vehicles.
Recommended Principles

• To continue to demonstrate leadership in energy and carbon reductions at the local level;

• To build on existing synergies by continued collaboration of City, County, University of Virginia and community partners;

• To integrate the role of energy and carbon emissions in projects and planning;

• To equip the community at all levels to make informed decisions about the impacts of carbon emissions and energy; and

• To identify and promote actions that enable the community to reap the health, economic, and environmental benefits that accompany sound energy-based decisions.
Recommended Next Steps

1. Act on existing commitments to further address carbon and energy considerations in planning and operations, including:
   - Comprehensive and other planning efforts
   - *Action Plan* for each entity establishing near-term goals
   - Regular updates on progress toward reducing emissions

2. Build on stakeholder involvement developed through the *LCAPP* to expand information exchange via:
   - Celebration of local successes in private sector
   - *Community Toolkit*
   - Annual meeting of management and project leaders
   - Community engagement
• Local Energy Alliance Program (LEAP)
• Better Business Challenge

www.cvillebetterbiz.org

www.leap-va.org
• Updating Charlottesville GHG inventory (City)
• PowerSaver EE Loan Program (LEAP/UVA Credit Union)
• Commercial Loan Program for RE & EE (City/LEAP)
• 106 kw PV installation of Charlottesville High School (City)
• County Environmental Stewardship Strategic Plan (County)
• UVA 2025 GHG Reduction Commitment (UVA)
• Biomass Test Burn in Main Heating Plant (UVA)
• Green Building Practices (City/UVA/County)
• Pilot Fast-Charging Electric Vehicle Stations (City)
AREA A
and
AREA B

Albemarle County, City of Charlottesville
and
University of Virginia

Approved by the PAC Tech Committee:
January 19, 2012

Neighborhood Development Services
January 2012

Revised Common Map
**Area A** – All Properties now owned by the University of Virginia and its related foundations that are used for educational purposes as designated on the Map

**Area B** – Land which lies at the boundaries of the University in either the City or the County, or has otherwise been designated as part of Area B, and on which the activities of any, or all three, of the parties might have a significant effect, as designated on the Map. Development in these areas continues to be guided by the current City and County Comprehensive Plan and the current University of Virginia Grounds Plan

**Area C** – All land on the Map not included in Areas A and B
UVa Proposed Changes to the Map
The three parties will collaborate in planning for lands within Areas A, B, and C. Plans for lands within Area A are part of the University’s Grounds Plan and are reviewed by the University’s Master Planning Council and approved by the Board of Visitors. Plans for the lands within Area B will be submitted to PACC Tech and then to PACC for recommendation to the responsible jurisdiction for review and adoption within their respective Comprehensive Plans. Plans within Areas B and C are reviewed by City or County elected bodies as part of their respective Comprehensive Plan adoptions.
AREA A
and
AREA B

Albemarle County, City of Charlottesville
and
University of Virginia

Approved by the PAC Tech Committee:
January 19, 2012

Neighborhood Development Services
January 2012

Adopted Map – February 2012
UVa Bicycle Share Proposal
Rebecca White, Parking and Transportation
Julia Monteith, Office of the Architect
Office of the Architect for the University Planning Process and Coordination

VDOT transportation enhancement grant (TEP)

2010 – Planning Grant

2011 – Implementation Grant

Coordination and support from the MPO and City

Open Community Use

Phase 1

VOTER ENROLLMENT

2010 – Planning Grant

2011 – Implementation Grant (HP)
What is Bicycle Share?

Where in the World is Bicycle Share?

How Bicycle Share will Work at UVA?
Bike Transit

Solar Powered Kiosk

Custom Designed Bicycles

Secured Docking Station

1st Generation
Yellow Bikes

Member Options
24 Hour
30 Day
Annual

2nd Generation
Bike Library

3rd Generation
Bike Share

Ride & Return!
First 30 min...Free!
Next 30 min...$
Next 30 min...$
24 hours...$$$$
Swipe UVA ID
Membership Options

24 hours

30 Day

Annual

Rental Options

First 30 minutes - free

Next 30 minutes - $10

Hourly - $15

Daily - $30
London - 6,000 Bikes

Bicycle Share Locations, Bixi
Montreal - 5,000 Bikes
Twin Cities - 1,200 Bikes
Denver - 510 Bikes
Washington D.C. - 1,100 Bikes
Office of the Architect for the University

UVa Proposed Station Locations

100 Bicycles. 11 Stations