

The New Environmental Awareness in the United States: Successful Climate Protection at the Grassroots

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Arlington County, Virginia, USA

April 23, 2008
Institute Dr. Flad, Stuttgart



Grassroots = foundation





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We can all be environmental superheros

Overview of this presentation

1. Where in the world is Arlington?
2. Local climate action in the United States
3. What Arlington launched one year ago
 - How we planned it
 - How we presented it
4. Our successes thus far
 - In Arlington
 - Enthusiasm and action is contagious
5. Our next steps



Arlington, Virginia USA

Population: 205,000

67 km² : 3,060 people/km²

Our impact >> our size





Arlington is home to the Pentagon
(national military headquarters)



We enjoy access to and
wonderful views of
Washington DC

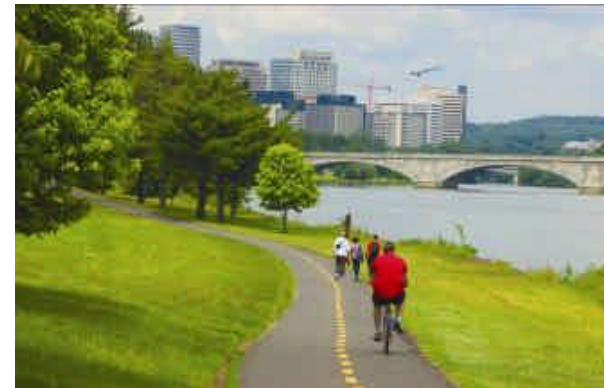


Arlington embraces transit-oriented development, or “smart growth.”



Our residents are diverse, well-educated, and politically active.

We have many recreational opportunities and Arlington is a fun, convenient place to live and work.



We are fond of home, but we know we live in a global community and share in a global economy.



Global economy: The boiler in my home in Arlington.

Together we confront a
global challenge:
climate catastrophe.



Rock 'n Renew: Events - Microsoft Internet Explorer

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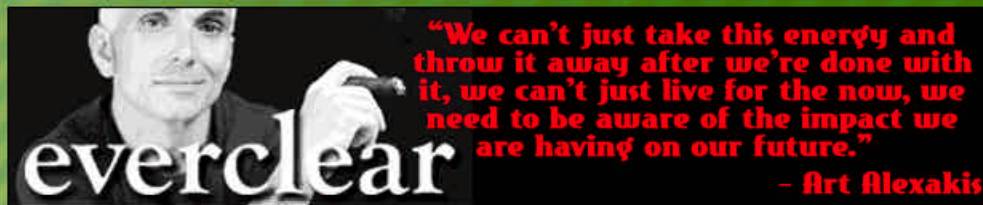
Address http://www.rocknrenew.com/events.php

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Latest Video



Watch Jonny discuss plans for Rock 'n Renew's newest project—a sustainable garden and ecology center in Bayonne, New Jersey!

Rock 'n Renew Ecology and Conservation Programs (FUNDED BY YOUR SUPPORT)

Each project in our programming series links a private school, a public school, a local conservation site, and local businesses to foster mentoring programs, internships, and appreciation of our precious natural resources. We cannot properly educate students on how to protect the planet without providing them a direct relationship to nature. With this in mind, the Rock 'n Renew Ecology and Conservation Programs provide students with hands-on education in conservation and ecological respect. In each community, we foster direct partnerships with organizations and corporations that have access to protected land, and we take students into areas with stunning and dynamic eco-systems that many of them have never encountered.

Montauk Adventures

In conjunction with several Rock 'n Renew schools, we are commencing a series of trips





- Individual states are setting regulations and policies addressing climate
- April 18, 2008 Governor's Declaration on Climate Policy

California

Illinois

Connecticut

Kansas

New Jersey

Arizona

Colorado

Delaware

Florida

Maryland

Massachusetts

Maine

Michigan

New Mexico

New York

Oregon

Virginia

Washington

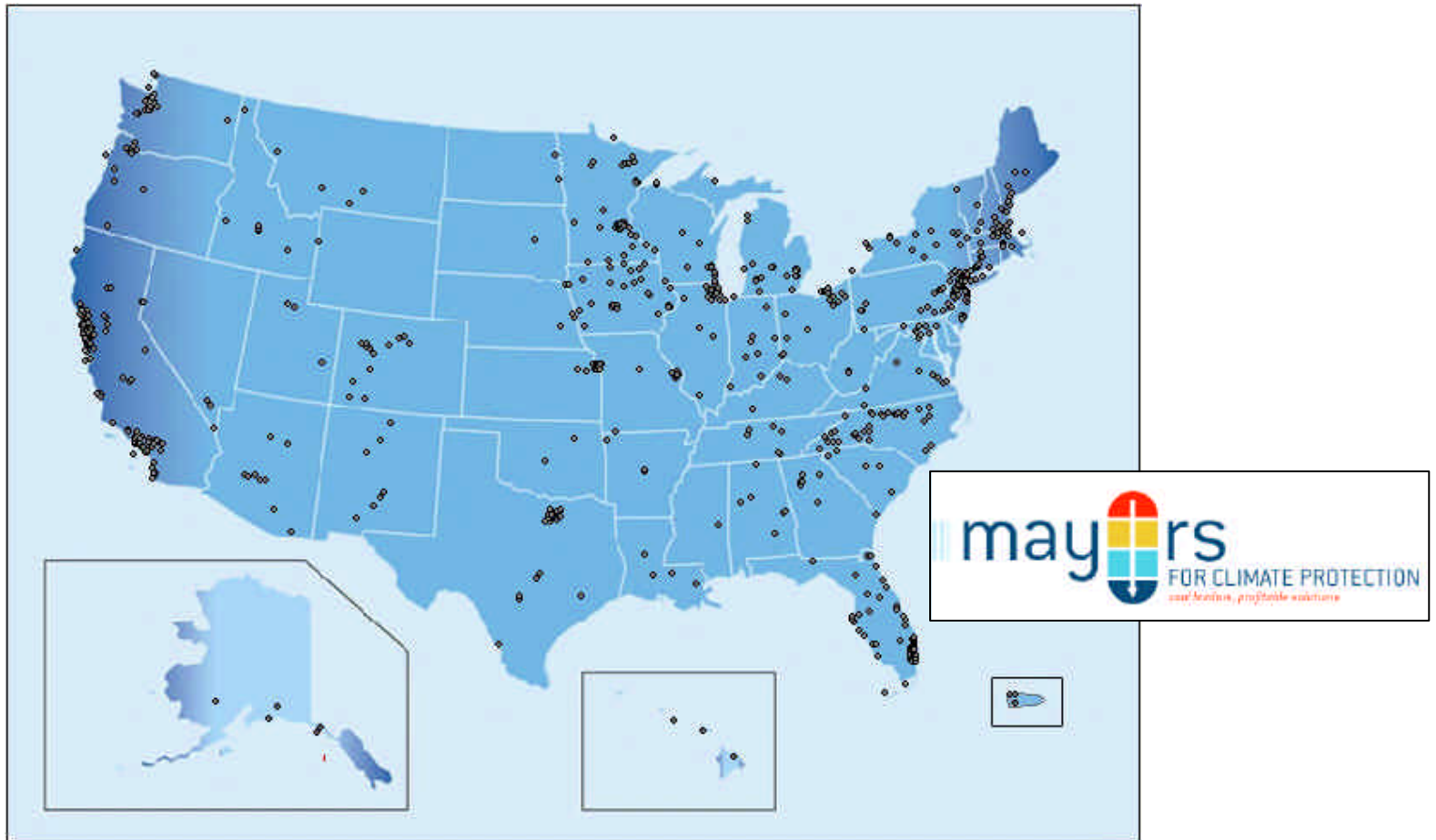


February 16, 2005 – Kyoto Protocol became law in 141 countries. The U.S. sits on sideline.



The Mayor of City of Seattle launched the U.S. Mayor's Agreement on Climate Protection, seeking commitments from cities to join climate action effort with Kyoto Protocol targets.

831 City Mayors (as of April 17, 2008), representing 80,000,000 people

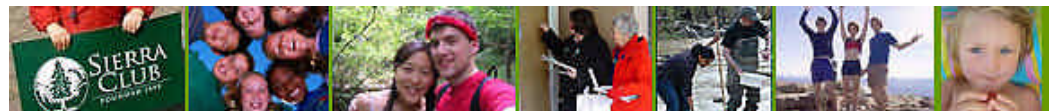


July 16, 2007: 12 Counties signed “U.S. Cool Counties Climate Stabilization Declaration”

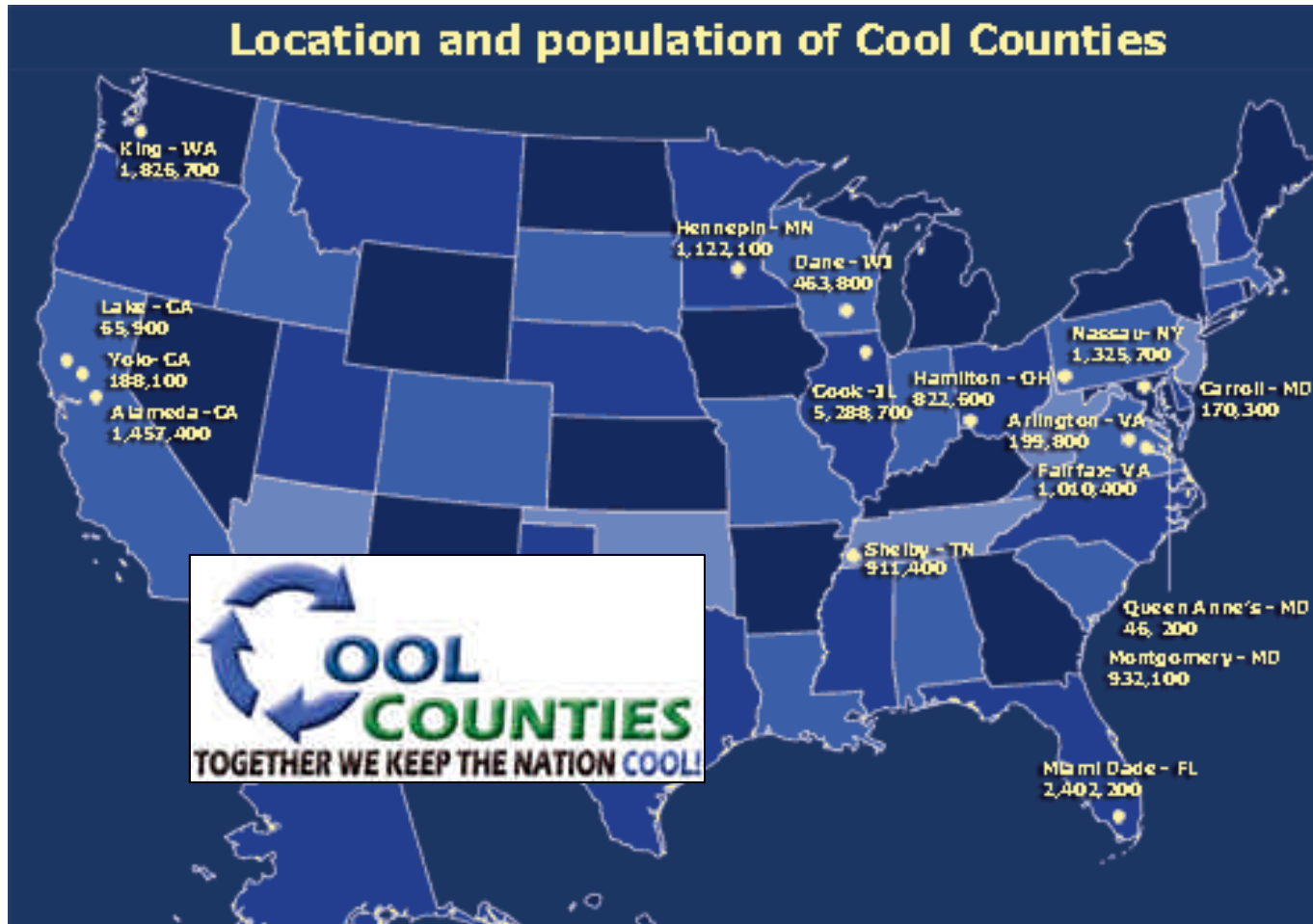


- Stop emissions growth by 2010
- 80% emissions cut by 2050

Sierra Club environmental membership group was instrumental in this effort.



28 Counties representing 26,000,000 people have signed the Declaration



Official Site of Arlington County Virginia : : Arlington, Virginia - Microsoft Internet Explorer

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Address <http://www.arlingtonva.us/>

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BUSINESS VISITORS KIDS TEENS

HOME | SERVICES | TOPICS | NEWSROOM | CALENDAR | JOBS | DEPARTMENTS



A diverse, inclusive, world-class urban community

Board Adopts Sustainable FY09 Budget

The \$1.18B budget maintains core services, eliminates a \$20 million annual unfunded liability for retiree health care, and funds major upgrades of the County's transportation and stormwater infrastructure. It is a 9.9% increase over the FY08 revised budget. [Press Release>>>](#) | [Adopted Budget](#)

FitArlington Sports Festival April 26



Join in the 1st Annual FitArlington Sports Festival at Bluemont Park, April 26. Dodgeball tournament, soccer skills challenge, Australian rules football clinic, tennis tournament, football clinic, ultimate demonstration games, drop-in kickball games, basketball hot shot competition, youth tennis rapid rally competition. [More info>>>](#)

AIRE Tip #7: Step Out Of Your Car

Take advantage of Arlington's many transit: [Metrorail](#), [Metrobus](#) or [Arlington Transit](#). Hop on your bike — view a map [STEP OUT OF YOUR CAR](#) of Arlington's many bikeways and bike lanes. Go for a walk ... and get a heart-healthy workout in addition to reducing emissions. For every mile you don't drive, you'll save one pound of CO₂. [See more tips >>>](#)



Green It Arlington! Workshops & Events

Learn how to create a raingarden, build a green kitchen, improve energy performance, and more. [Details on website>>>](#) | [Download flier>>>](#) (493KB, PDF)

Confident City Cycling Classes

Cyclists can learn to safely share the road with cars, other bikes, and pedestrians in one of the free classes sponsored by the Washington Area Bicyclist Association. More details can be found on the [WABA site >>>](#)

[More news >>>](#)

- About Arlington
- Contact Us
- Today In Arlington
- Emergency Preparedness
- Arlington En Español
- Update Arlington
- Arlington Insider
- The Citizen
- E-mail Subscriptions

Our Vision:

Arlington will be a diverse and inclusive world-class urban community with secure, attractive residential and commercial neighborhoods where people unite to form a caring, learning, participating, sustainable community in which each person is important.

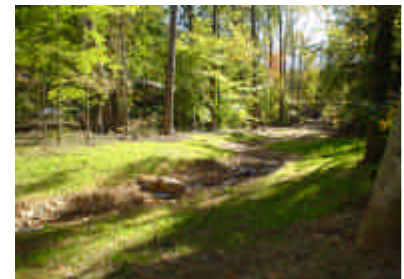
SERVICES

- [Affordable Housing](#)
- [Arlington TV](#)
- [Bike Registration](#)
- [Building Permits](#)

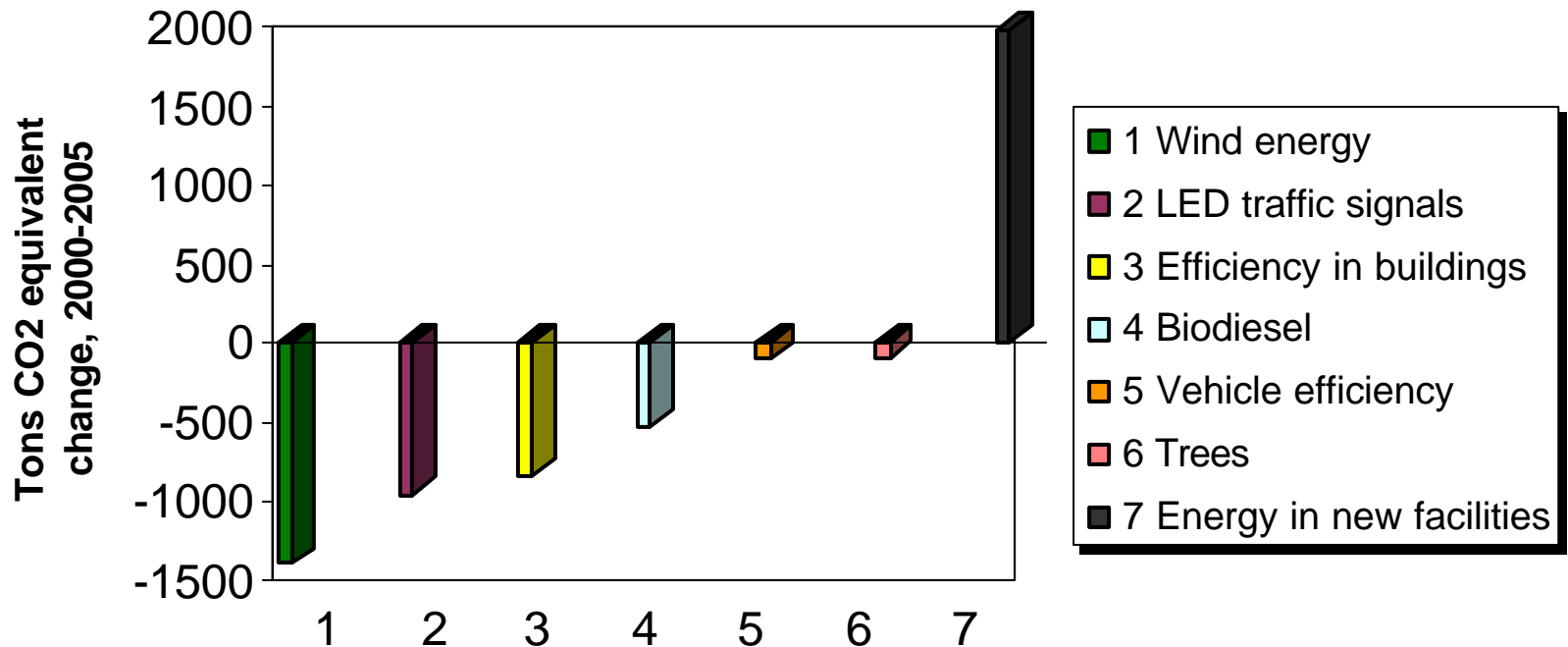
Autumn 2006 - Paul Ferguson's priority for 2007:
environment broadly, climate in particular

- Interdepartmental staff team formed in November, meets to generate and vet ideas
- Dept. of Environmental Services in lead, but all areas of government have significant role.
- An *ad hoc* citizen group provides input and further guides planning in December
- Late December breakfast meeting with business leaders – response is positive

Climate
action
links many
existing
efforts &
programs



Existing environmental initiatives in gov't operations result in 2.6% net decline in GHG emissions from 2000 to 2005 -- *and a 3.3% decline by 2007*



- January 1, 2007 announcement by County Board Chairman Paul Ferguson
- Goal: 10% cut in greenhouse gases (GHG) from County government operations 2000-2012
- Specific actions by government in 2007
- Bring message to residents and businesses. Premise: the County is “leading by example”
- Establish a community-wide emissions reduction target, and create an agenda for community action.



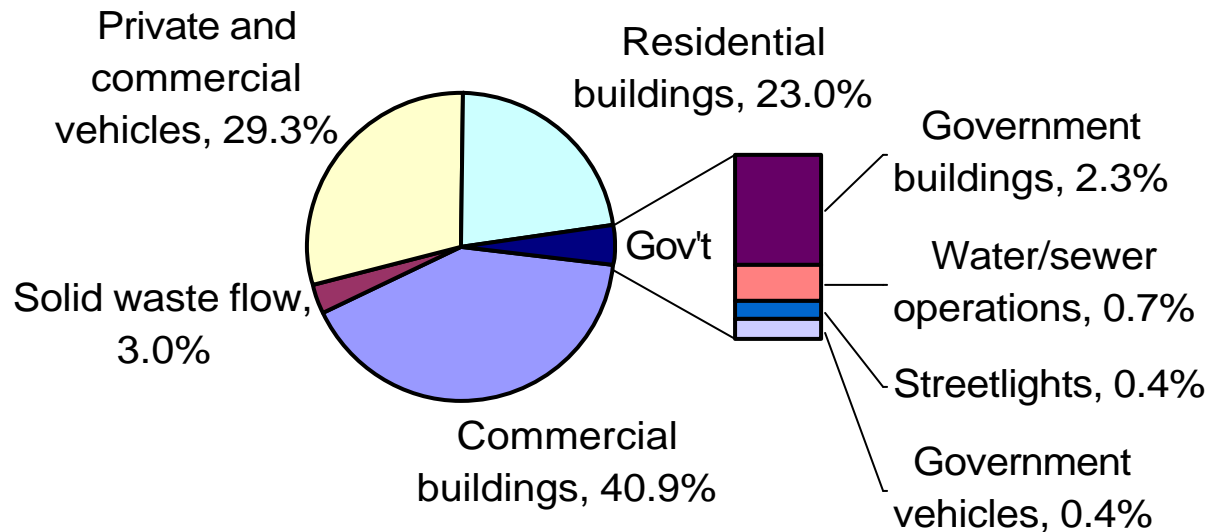
County action: leading by example

- Cut GHG emissions from County operations by 10% by 2012
- Cut energy use in County operations 2% per year through energy efficiency
- Buy more wind power, from 3% to 5%
- Plant 1,200+ canopy trees per year
- Enhance our green building policy
- Renewed emphasis on recycling
- Install solar equipment on facilities

Total Arlington County Greenhouse Gas Emissions by Sector, 2000

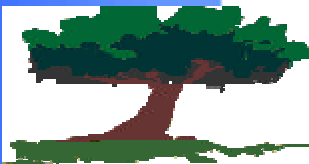
Total community emissions: 2.9 million tons CO₂-equivalent

Government < 4% of total, so community outreach critical





- Provide 20 free home energy audits
- 2,000+ free compact fluorescent lamps
- Personal property tax break on certain fuel-efficient vehicles
- Work with Dominion Virginia Power on low-income home weatherization
- Partner with local environmental group
- Encourage, assist, and recognize climate-friendly activities by the private sector
- Business summit with AED



*Arlingtonians for a
Clean Environment*

Immediate reaction, January 2007

- ~~The Washington Post~~ gives the story front page, A1, above-the-fold coverage on Jan. 2, with supporting editorials later in week
- Congratulatory messages to the County Board office
- U.S. Senate Democratic leadership calls Mr. Ferguson to Capitol Hill for press event



...and away we go!

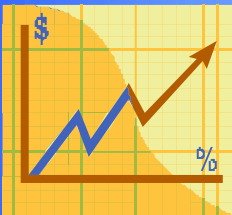
*Some of our neighbors are
jealous of our new good publicity.*

*That is a good thing!
We want them to join
us – there is strength in
large numbers.*



Energy Efficiency is Job # 1

- Cost-effective... *smart!*
 - Arlington typically finds 5-year payback on improvements (20% return on investment)
 - Loads of “low-hanging fruit” in lighting, HVAC systems, building controls, motors and drives, etc.
 - We find cost-effective improvements even in new buildings.
- Energy efficiency provides a hedge against uncertain energy price increases



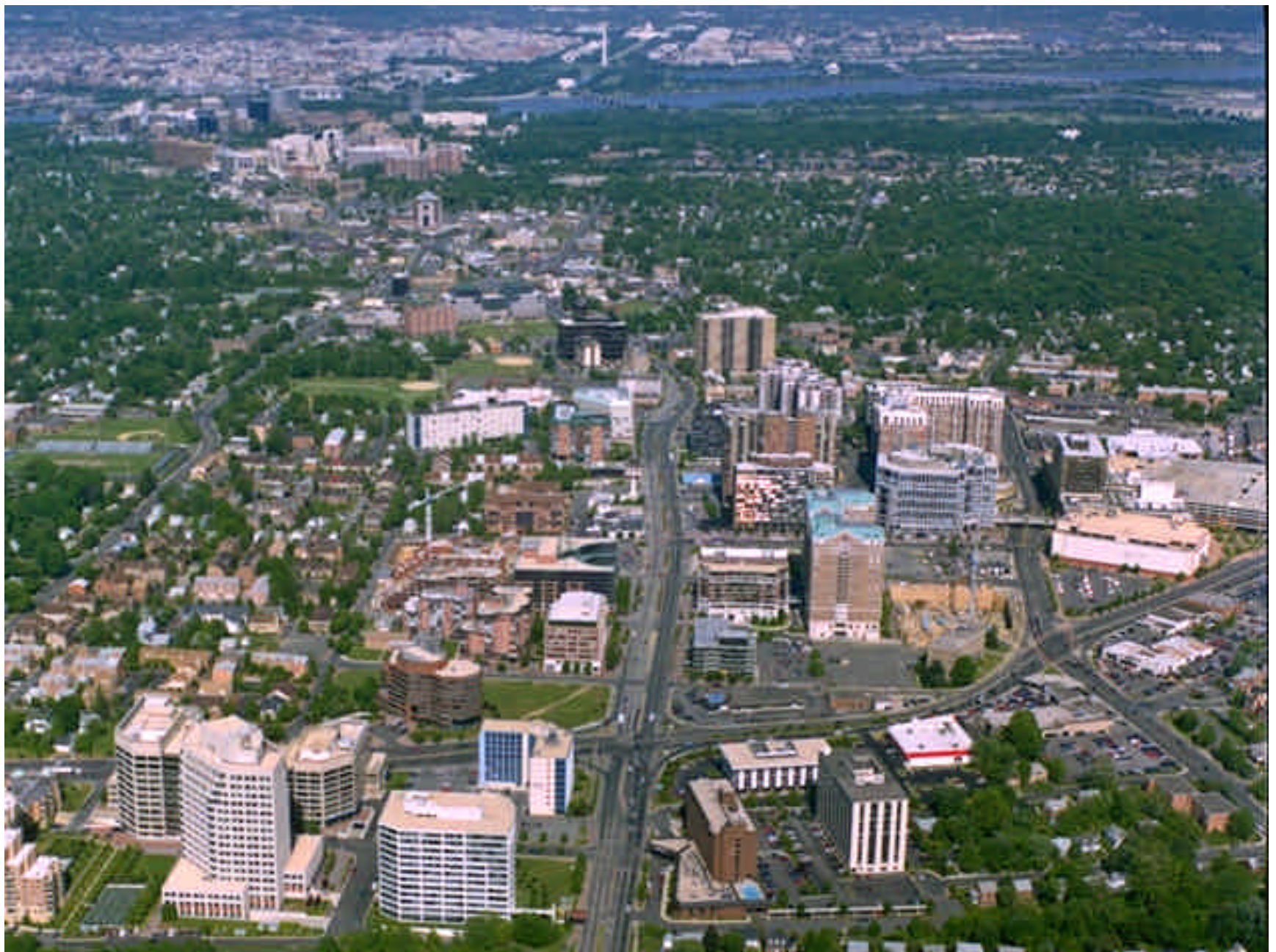


Climate action serves many County goals

- Serve senior citizens and low-income residents: cut costs, improve comfort
- Affordable housing is more than low rent: energy efficiency lowers operating costs
- Public health: reducing greenhouse gases improves local air quality too
- Sound transport planning serves people, business, and community
- Energy efficiency is smart business sense

GHG emissions from buildings are large

- U.S. average: 36% buildings
36% industry + agriculture
28% transportation
- New York City: 79% buildings
- **Arlington County: 66% buildings**



Active partnerships are essential to success

- Voluntary U.S. Energy Star program
- The Chamber of Commerce
- Faith communities
- Environmental groups, regional groups

*Arlingtonians for a
Clean Environment*



Board-approved FY 2008 Budget: Environmental Sustainability Fund

- Funded through new residential electric and gas utility taxes; tax based on energy use
- First 400 kWh/month electricity exempt; first 20 therms/month natural gas exempt
- Capped at \$3/month per account, many households will pay no tax
- \$1.5 million in revenue for climate action, institutionalizing AIRE, 4 new FTE



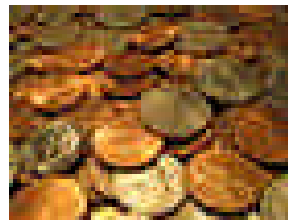
Board-approved FY 2008 Budget: Environmental Sustainability Fund

- Pays for upgrades in County facilities
 - Continue to lead by example, maximizing improvements for 180,000 m² of buildings, plus infrastructure, plus solar projects
- Pays for outreach & incentives for residents and the commercial sector
 - Workshops, seminars, energy audits, incentives to take action, business transit and recycling programs

“Arlington will be a diverse and inclusive world-class urban community with secure, attractive residential and commercial neighborhoods, where people unite to form a caring, learning, participating, **sustainable** community in which each person is important.”

Economic Sustainability ↔ Environmental Sustainability

Two sides of same coin



Inspired by AIRE, and convinced the market is changing, entrepreneurs approached the County with a novel business plan: to operate an all-hybrid fleet of taxicabs.



enviroCAB
Transporting You to a Cleaner Future

The County awarded them a business license for up a fleet of up to 50 cabs. This is the first all-hybrid taxicab fleet in the United States. Perhaps not as fuel-efficient as small European vehicles, but a good step forward in the U.S.

First AIRE Champions awards given in November 2007: three ENERGY STAR buildings. Five more Champions will be named on April 22, 2008.

The private sector values the recognition!



Arlington County Board Chairman Paul Ferguson with Ben Comm of Jones Lang LaSalle; Steve Dunn from SRA International; and Tom O'Neil of JGB Companies.



Now 8 cities *in Virginia* have signed the U.S. Mayors' Agreement on Climate Protection (January 2007 = 3)



Now 5 counties *in Virginia* have adopted the Cool Counties Climate Stabilization Declaration

(Cool Counties did not exist Jan. 2007)



Metropolitan Washington Council of Governments: Maryland, DC, Virginia

- Regional coordination, no authority
- Now encouraging climate action

Go Green Virginia, initiated by VML
President Jay Fisette of Arlington County
Launched January 2008, modeled on AIRE

- “Friendly competition” to pursue green policies and climate-friendly practices



GoGreenVA is a
Virginia Municipal
League initiative

- Energy/climate analyses
 - Update emissions inventory, forecasts
 - County gov't energy plan
 - County climate action plan



- In-house efficiency improvements (lighting, HVAC, controls, motors, solar, etc.)

- Business and community outreach
 - AIRE Champion awards
 - Energy Star buildings
 - LEED-certified buildings
 - ATP commuter services leaders
 - Exemplary recycling partners
 - AIRE Partners for collaboration



- Continue activity toward 10% cut by 2012 in County operations
- Continue regional and state collaboration
- Design and implement community climate action plan
- Stop emissions growth by 2010, and cut emissions 2% per year thereafter
- *Attitude: We can do this*



- www.arlingtonva.us/climate
- www.arlingtonclimateblog.com
- climate@arlingtonva.us
- jmorrill@arlingtonva.us

Virginia Tech (a state university) and Pepco Energy Services (an energy services company) approached the County independently; our introducing them to each other led to *Energy Efficiency Partnership of Greater Washington* with \$500 million commitment from Hannon-Armstrong.



Associate partners:



- Community outreach



- Arlington wins the U.S. EPA/National Association of Counties' ENERGY STAR *Change-a-Light Challenge* (medium-size County) – for success encouraging residents to change a light to a compact fluorescent
- Fairfax County wins same for large-size County.