Arlington Initiative to Reduce Emissions

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Community-Based Initiatives to Combat Global Warming
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This Presentation

• Success beyond our expectations
• Overview of initial program & goals
• Establishing the baseline
• Climate action integrates existing efforts
• Leading by example
• Reaching out to community
• Demonstrate co-benefits
• The Payoff: internal & external

...and the beat goes on
• January 1, 2007 announcement by Arlington County Board Chairman Paul Ferguson

• Set goal: 10% reduction in greenhouse gas emissions from County government operations from 2000 to 2012

• Identified specific actions in 2007 by County government, with active outreach to residents and businesses for their involvement

• Climate action plans will set future agenda & work plans; Cool Counties helps set targets
Year 2000 baseline emissions inventories prepared using ICLEI CCP software

Corporate emissions (109,000 tons total):
- 74,000 tons eCO₂ government
- 35,000 tons eCO₂ schools

Community emissions:
- 2.9 million tons eCO₂
  (about 15 tons per person)
Baseline Emissions

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

- Commercial buildings, 40.9%
- Residential buildings, 23.0%
- Private and commercial vehicles, 29.3%
- Solid waste flow, 3.0%
- Government buildings, 2.3%
- Water/sewer operations, 0.7%
- Streetlights, 0.4%
- Government vehicles, 0.4%
Climate Action Integrates Environmental Programs

- Our past efforts have cut CO$_2$ emissions 2.6% between 2000 and 2005, amid increasing services to public and growth in facilities.
- No single “silver bullet”. Rather, a mix of actions and policies together cut CO$_2$.
- This result is not unique to Arlington: Kansas City and Ann Arbor have found similar reductions in CO$_2$ from such practices and policies over similar time periods.
- Therefore, we seek to encourage private sector to embrace similar practices.
Existing environmental initiatives in government operations result in a 2.6% net decline in GHG emissions from 2000 to 2005.
County activity leading by example

- Aiming to cut energy use in County buildings 2% per year through improved energy efficiency
- Doubling wind power buy (6% of total)
- Planting 1,200+ canopy trees per year
- New county green building policy
- Renewed emphasis on recycling
- Installing solar on facilities
- Communicating our activities, success
• Cost-effective… *smart!*
  – Arlington typically finds 5-year payback on improvements (20% return on investment)
    • Some paybacks ~8-12 years, big ticket items
    • Some paybacks ~8 weeks, common sense
  – 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
Active Outreach

- Extensive use of Energy Star tools
- Chamber of Commerce & members
- CFLs, home & business energy audits
- Engaging the faith community
- Environmental groups, regional groups
Climate action serves many County goals

- Assist 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
- Smart transport planning serves business & residents
Board-approved FY 2008 Budget: Environmental Sustainability Fund

- Funded through new residential electric and gas utility taxes; tax based on 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

- Fund upgrades in County facilities
  - Continue to lead by example, maximizing cost-effective improvements for 1.8 million sq. ft. of buildings plus infrastructure
- Fund outreach & incentives for residents and the commercial sector
  - Workshops, seminars, energy audits, incentives, enhance employee transit and business 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.

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Economic Sustainability ↔ Environmental Sustainability

Two sides of same coin
Convinced the market is changing, this summer entrepreneurs approached the County with a novel business plan: to operate an all-hybrid fleet of taxis. The County awarded them 50 certificates (‘medallions’).

Home performance contractors are now sprouting up in this previously underserved market, e.g. --
Virginia Tech and Pepco Energy Services 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:
Seven cities in Virginia have signed the U.S. Mayors’ Agreement on Climate Protection.

Three counties in Virginia have adopted the Cool Counties Climate Stabilization Declaration: Fairfax County, Arlington County, and James City County.

Cool Counties: aiming to stop emissions growth by 2010; achieve an 80% reduction by 2050.
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