

green.dc agenda



Greening the District



DDOE's mission is to improve the quality of life for District residents by protecting and restoring the environment. DDOE works through partnerships with other District agencies, business groups, nonprofits and residents to conserve natural resources and energy and promote policies that support a sustainable city.

Green DC Agenda



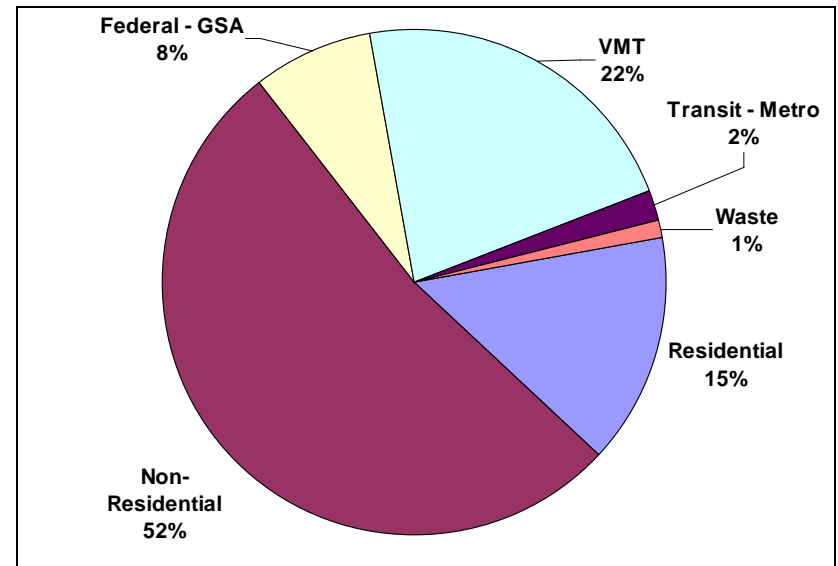
- Action Agenda to green government operations
 - Current Successes and Key Commitments
 - Organized around seven themes: Homes; Schools; Neighborhoods & Community; Transit & Mobility; Business, Jobs & Economic Development; City & Government Operations; Parks & Natural Areas
- Spotlights on Anacostia Restoration and Climate Change
- Green DC Map (print and online)
- green.dc.gov



Climate Initiative



- Climate planning process underway with OP and ICLEI- Local Governments for Sustainability
- Greenhouse Gas Inventory completed
 - Government Operations and Community
 - 10.6 mm tons CO₂e (19.7 tons pp)
- Challenges
 - Low local generation, long transmission
 - High percentage from coal
 - Highest daily population growth of any large city (400,000 or 70%)



Green Building



- Green Building Act of 2006 (updates under review)
 - LEED silver or higher for public buildings
 - First standard binding on private buildings
- 85 LEED certified buildings, 600+ registered
- 120 EPA Energy Star® buildings (45Msf)
- 2008 building codes
 - ASHRAE 90.1 2007 energy
 - Cool roofs, water efficiency
- 2010 code revisions
 - ASHRAE 189.1 energy
 - ICC Green Codes



Energy Programs



- Sustainable Energy Utility (SEU)
 - Performance based outcomes, programs
 - Comprehensive energy analysis underway
- Access to financing (PACE)
 - Property tax repayment
 - \$250M initial bond authorization
- Smart meter conversion (Pepco)
- Stimulus—weatherization, government buildings



Renewable Energy



- SEU and PACE
 - Authority to support renewable energy installations
- Wind feasibility study
- DC Government purchasing 50% renewables
- Stimulus— geothermal (DRES, fire stations)
- Solar PPA development – all sectors
- RE GIS mapping
- EV pilot + solar chargepoint

- DOE NREL Solar America Showcase
 - technical assistance
 - pilot schools
- PPA development
- PV and Solar Thermal
- Projects in each ward
- Curricula development and integration
 - science
 - math
 - social studies
 - accounting & finance
 - vocational technology



Clean Energy for DC Schools



Building on Past Successes: Renewable Energy Demonstration Program

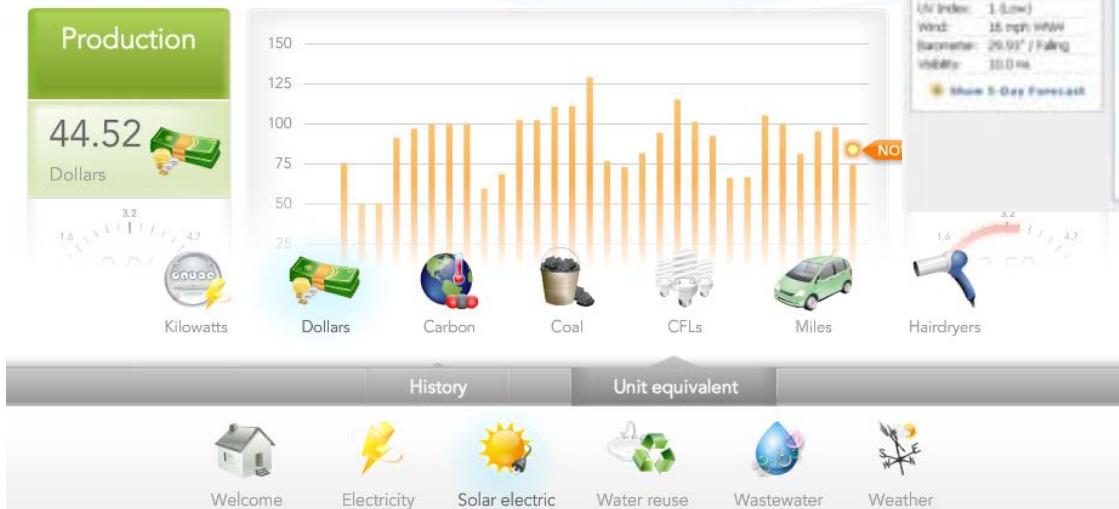
- Demonstration Grants from 2005 – 2008
- Awarded over \$880,000
- 65 photovoltaic/small wind demonstration projects (238 kW) – residential, commercial, institutional and non-profit



Realtime Web Monitoring

Total Electricity Production vs. Consumption

Dollars saved last month



- Rebates for the installation of solar photovoltaics, small wind where suitable. Additional rebates – Geothermal, Solar Thermal, Biomass
- up to \$33,000 for 20kW /kWe
- Stimulus – expansion of geothermal and solar thermal incentives
- Tiered rebate schedule 2009 - 2012
 - \$3/Watt equivalent first 3,000 Watts/Watts equivalent
 - \$2/Watt next 7,000 Watts
 - \$1/Watt final 10,000 Watts
- **greenenergy.dc.gov**



2009 Program Year

- 68 photovoltaic installations
- 251 kW of capacity
- \$631,000 in rebates
- Mount Pleasant Solar Cooperative – 48 homes, 129 kW

2010 Program Year (In Process)

- 38 PV to date, \$396,000
- 252 photovoltaic installations in queue
- 1.2 MW of capacity
- \$2.9 million in rebate requests
- Average request - \$11,500
- Capitol Hill, Georgetown, Takoma solar coops in development



- CAEA 2008 amends Renewable Energy Portfolio Standard Act of 2004
- Allows for SRCC-rated solar heating, cooling, or process heat systems
- 2020 goal - 20% from tier one renewable sources, 0% from tier two, not less than 0.4% from solar energy
- Raises ACP - \$500/SREC to 2018
- March 1, 2010, energy companies selling electricity in DC must file an energy portfolio report with DDOE
 1. breakdown of the avg cost/kWh by source
 2. avg capital cost/kW
 3. avg fixed and variable costs associated with O&M per megawatt

- RECs registered through DC Public Service Commission
- DC currently accepts out-of-state SRECs
- No in-state solar thermal RECs

Future - REC Trading Program

- Create a thriving local REC market
- Establish partnerships - system owners, aggregators, system integrators, installers

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