



SUSTAIN  
ABILITY



DC

# **SUSTAINABLE DC:**

## **Climate Planning and Urban Resilience**

*[sustainabledc.org](http://sustainabledc.org)*

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**October 1, 2013**

# DC is already a leader

**400+ LEED certified buildings; 300+ ENERGY STAR®**

**District Government buying 100% green power**

**Bag tax reduced disposable bag use by 60%**

**Almost 2,000,000 square feet of green roofs**

**First major bikeshare in U.S. (25,000+ members)**

**50% of District trips by transit, walking, or bike**



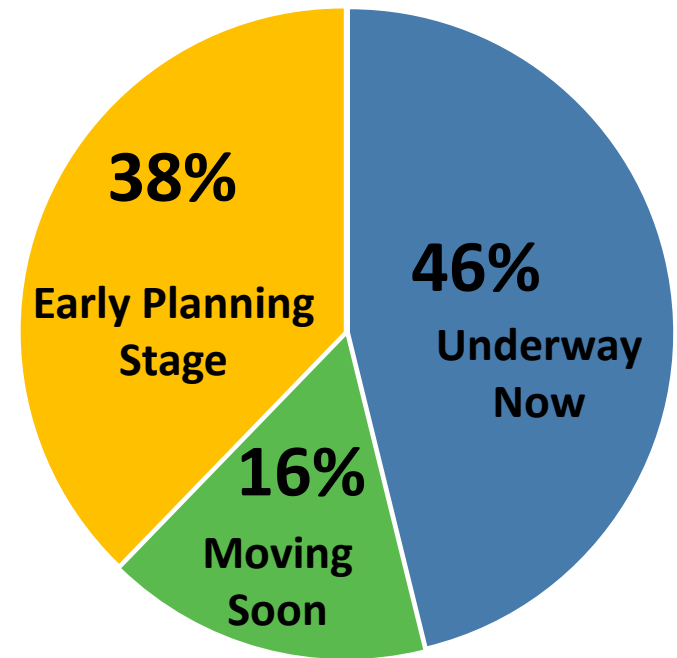
# Cutting Edge Framework

- ▶ 32 Ambitious Goals and Measurable Targets
- ▶ 143 Specific Actions – short, medium and long term

4 CHALLENGES	7 SOLUTIONS
<ul style="list-style-type: none"><li>• Jobs and the Economy</li><li>• Health and Wellness</li><li>• Equity and Diversity</li><li>• Climate and Environment</li></ul>	<ul style="list-style-type: none"><li>• Built Environment</li><li>• Energy</li><li>• Food</li><li>• Nature</li><li>• Transportation</li><li>• Waste</li><li>• Water</li></ul>

# Implementing Fast Action Now

- ▶ **New legislation:** Sustainable DC Act II being developed now
- ▶ **Mayor's Order:** mirroring Obama's Executive Order 13514
- ▶ **Performance Plans:** Building actions into agency Performance Plans
- ▶ **Coordinating with other agencies:** identifying sustainability in further studies and plans



# BUILT ENVIRONMENT 2032:

## Meet net-zero energy standards with all new construction

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Credit: "H Street Festival" by Flickr user jsprig [CC-BY-NC-2.0]



A low-angle shot of a white wind turbine against a bright blue sky with scattered white clouds. The turbine's three blades are visible, extending from a central hub. The tower of the turbine is in the foreground, slightly out of focus.

# ENERGY 2032:

Reduce energy consumption by **50%**

Increase the use of  
renewable energy  
to **50%**

Reduce annual outages to **0 to 2** events  
of less than 100 minutes per year

A blue Metrobus S9 is shown from a front-three-quarter view, driving on a city street. The bus has "S9" and "MC PETERSON SONGS" on its destination sign. The license plate is "NS91". The background shows a city street with other vehicles and buildings.

**TRANSPORTATION 2032:**  
Make **75%** of all trips  
by walking, biking, or transit



**WATER 2032:**

Use **75%** of our landscape  
to filter or capture rainwater  
for reuse



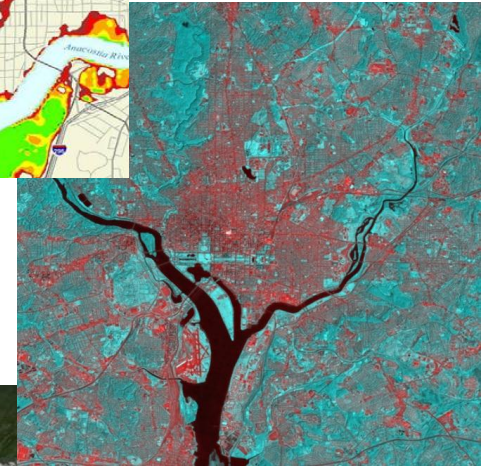
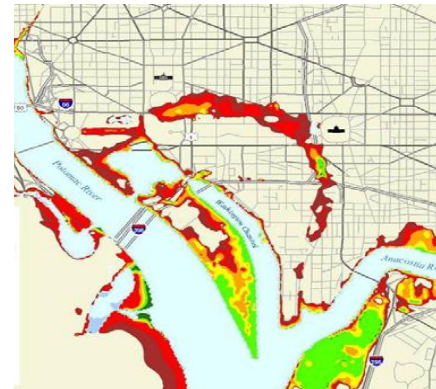
# CLIMATE 2032:

Reduce citywide  
greenhouse gas emissions by  
**50%**

Require **all** new buildings and  
infrastructure projects undergo  
climate impact analysis

# Climate Projections in DC

- ▶ **Sea Level Rise:** 41-57" higher levels (with rapid ice melt)
- ▶ **Urban Heat:** Number of Days Over 95°: 30 to 60 more days/year
- ▶ **Precipitation:** up to 15% more rain/year
- ▶ **Extreme Weather Events:** More frequent and more intense



# Climate Action Incorporated Throughout Sustainable DC



## **CLIMATE and ENVIRONMENT**

- ▶ Require adaptation solutions as part of planning consent for new developments. (Med)
- ▶ Evaluate the vulnerability of the District's energy infrastructure. (Short Term)

## **ENERGY**

- ▶ Work with utility companies to improve the reliability of energy transmission and distribution. (Med)

## **TRANSPORTATION**

- ▶ Design transit systems for resilience to extreme weather events. (Med)



# EnergySmart DC

## Comprehensive Energy Plan

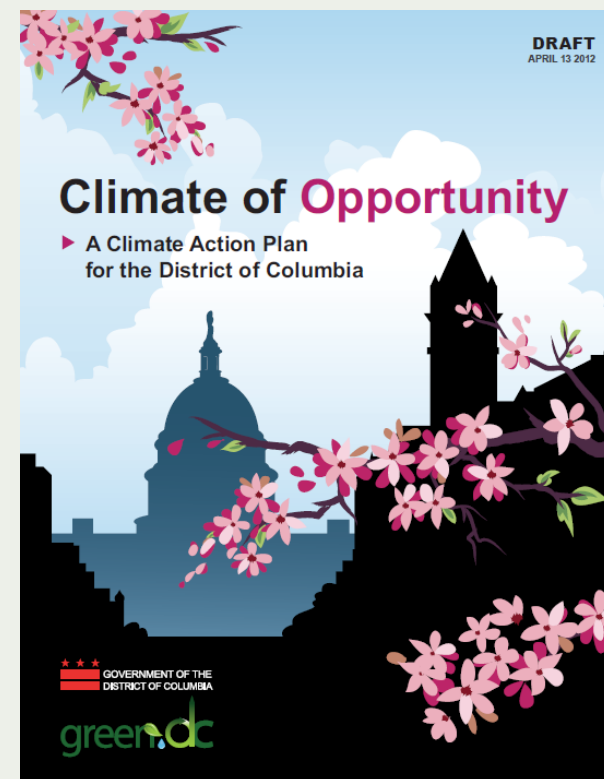
- ▶ **Sets ambitious energy goals for the District:**
  - ▶ Reduce consumption and increase local clean power generation through efficiency measures and district energy and renewables
  - ▶ Improve energy resiliency, such as through the Power Line Undergrounding Task Force to protect vulnerable transmissions lines
  - ▶ Expands energy business opportunities both locally and regionally based on the District's unique needs and Market Potential Study
  - ▶ Create green jobs for District residents



# Climate Action Plan

## Fall 2013

- ▶ Draft plan released in 2010, being finalized now
- ▶ Reduce greenhouse gas emissions by 80% by 2050 (from 2006 baseline) from sectors:
  - ▶ Transportation
  - ▶ Building Energy Use
  - ▶ Wastewater Treatment
  - ▶ Waste Management
- ▶ Already seeing impressive reductions from the 2012 GHG inventory: 12% reductions between 2006 and 2011



# Thank You! Questions?

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