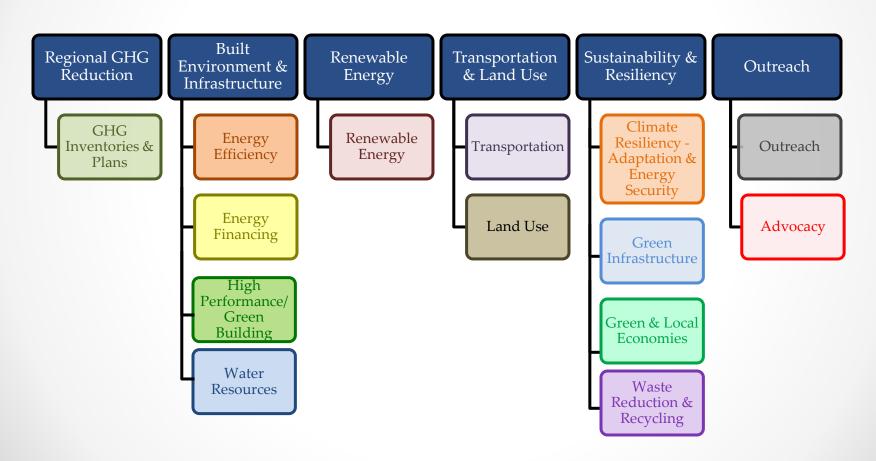


# Climate & Energy Survey Results and ENVISION Rating Tool

A. Campbell, COG Staff WRTC 5/1/2014



## 2013–2016 Action Plan Categories



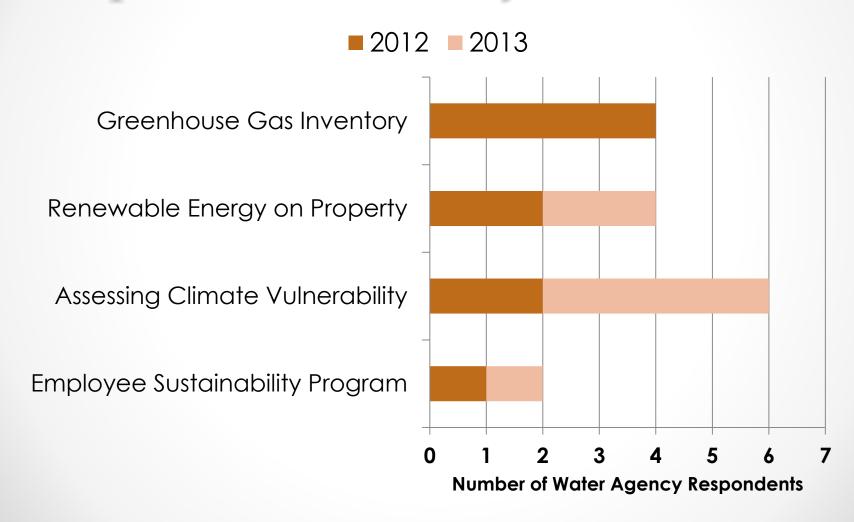


### **CEEPC Survey Results Received**

- √ Alex Renew
- √ DC Water
- √ Loudoun Water
- √ PWCSA
- √ UOSA
- √ WAD
- √ WSSC



# Response Summary





# Alexandria ReNEW

- ✓ Energy Minimization Plan goal: net energy neutrality
- ✓ Assessing impacts of climate change when upgrading facilities
- ✓ Use digester biogas, solar, biodiesel
- ✓ Offer employee sustainability training

ReNEW's digester produces enough gas to heat 793 homes a year





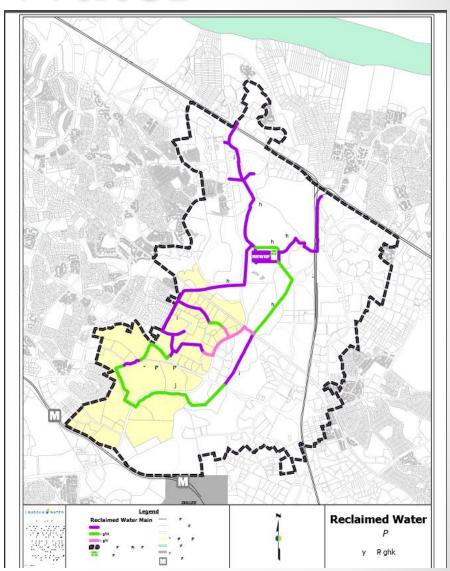
# DC Water

- Conducted a utility-wide greenhouse gas inventory in 2009
- Conducted vulnerability assessments at several facilities including Blue Plains
- Building a combined heat and power plant to generate 13 MW renewable energy

# Loudoun Water



- Implemented renewable energy system
- Green buildings
- Implemented a water reclamation system at Broad Run





## Prince William County Service Authority

- ✓ Conducted an energy study; evaluating alternatives
- ✓ New Public Education Building will be a green building
- ✓ Uses reclaimed water for irrigation





## **UOSA**

- ✓ Conducted an energy audit in 2008 that identified Energy Conservation Measures to be implemented
- ✓ Currently constructing a digester gas-fueled CHP system
- ✓ Established a Sustainability Policy





- ✓ Participated in Army Corps of Engineers Greenhouse Gas Accounting system
- ✓ Completed an energy audit and is working to implement an Energy Savings Performance Contract (ESPC) to install recommended energy conservation measures.
- ✓ Purchases 7.5% renewable energy through a GSA contract





# WSSC

- ✓ Developed a Greenhouse Gas Action Plan and Strategic Energy Plan
- ✓ Solar panels make 2 MW saving ratepayers \$350 million

About 30% of WSSC's electricity comes from wind power





## LEED

#### Leadership in Energy and Environmental Design

#### Categories:

http://www.usgbc.org/leed#rating

#### Credits for New Construction:

http://www.usgbc.org/credits/new-construction/v4

- Water conservation: some required, some optional
- Stormwater capture: optional



## THE ENVISION™ RATING SYSTEM







## What Types Of Infrastructure Will



## Envision<sup>TM</sup> Rate?



#### ENERGY

Geothermal Hydroelectric

Nuclear

Coal

Natural Gas

Oil/Refinery

Wind

Solar

**Biomass** 



#### WATER

Potable water distribution Capture/Storage Water Reuse Storm Water Management

Flood Control



#### **WASTE**

Solid waste
Recycling
Hazardous
Waste
Collection &
Transfer





#### TRANSPORT LANDSCAPENFORMATIO

Airports

Roads

Highways

Bikes

**Pedestrians** 

Railways

**Public Transit** 

Ports

Waterways

Public Realm

**Parks** 

Ecosystem Services Telecommunications

Internet

Phones

Satellites

**Data Centers** 

Sensors

# 60 Credits in 5 Categories



QUALITY OF LIFE

Purpose, Community, Wellbeing



LEADERSHIP

Collaboration, Management, Planning



RESOURCE ALLOCATION

Materials, Energy, Water



NATURAL WORLD

Siting, Land & Water, Biodiversity



CLIMATE AND RISK

Emission, Resilience

# Award Levels

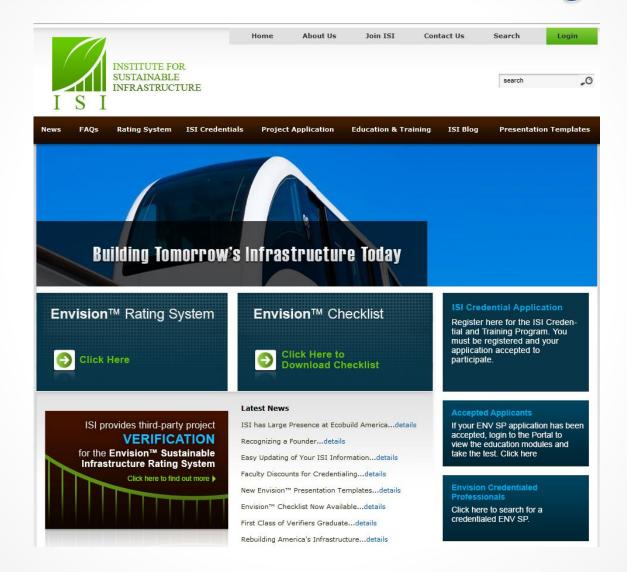


Recognition Level	Minimum Applicable Points	Minimum in Each Category
Bronze	20%	
Silver Award	30%	No minimum category
Gold Award	40%	percentage required
Platinum Award	50%	





## www.sustainableinfrastructure.org





# Questions

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