



*Green
Houston*



www.greenhoustontx.gov

Sustainability Partners

- City of Houston Sustainability Office
- Sustainability Council



- Air Quality: HHS
- Energy Efficiency and Renewables: GSD
- Transportation: Fleet
- Recycling, Composting, Waste Reduction: SWD
- Green Building Education: GBRC
- Water Quality/Conservation: PWE
- Greening and Open Space: PRD
- City Sustainability Policies: ARA



- C40/Clinton Climate Initiative Support
- ICLEI Support



Green Buildings – City of Houston

Energy Efficiency Performance Contracting

- 80 buildings complete or underway
- \$57 million spent to date
- 5.1 million square feet receiving energy conservation measures
- Office buildings, libraries, multi-service centers, police stations, fire stations, health centers, recreation facilities
- Financing through utility savings
- ***Future work***
 - ❖ ***Energy Star certifications for City buildings***
 - ❖ ***Consideration of Low Cost Bonds (QECCB)***



Residential Energy Efficiency Program

Home Weatherization Program

- No cost for residents (\$23 million grant funded program)
- 12-18% kWh reduction; as high as 20% over summer months
- High homeowner satisfaction
- Average savings = \$65-\$125 per month
- Used neighborhood approach to reach mass adoption



Renewables: Wind

Wind Power

delivered to City of Houston facilities

- COH has purchased 50 MW of wind power – 35% renewable
- **EPA ranks the City of Houston as the #1 municipal purchaser of renewable energy; #7 overall**
- *Future Work: City of Houston considers purchase of 80 MW – becomes 50% renewable*



Renewables: Solar



City Hall Annex



Solar

- Solar America City
- 17 emergency solar powered generators/container offices
- Solar streamlining, standardization and interconnection work



Spotlight: Green Office Challenge



- Improve environmental performance of commercial buildings and business operations
- Engage at all levels of influence: Tenants, Property Managers, Building Owners, and Management Districts
- Ensure reductions align with City of Houston goals
 - Reduction goals for energy, waste and water range between 10 and 50 percent
- Owners use Portfolio Manager and Tenants use City of Houston scorecard to enter in baseline data and create goals
- Lead towards third-party certification (such as LEED, Energy Star)



Spotlight: Green Office Challenge



Energy Efficiency Incentive Program

- Grant-funded incentive program for commercial office buildings
- Funds set aside for **Class B and C Buildings**
- Funds set aside for projects **under \$500k**
- Minimum **15 percent** energy savings



Spotlight: Green Office Challenge



- **Importance of LEED and Energy Star**
 - Houston: 176 LEED certified buildings – Tied for 4th in country
 - Houston: 175 Energy Star certified buildings – 7th in country (5th in square footage; 3rd in emissions prevented)
- **Future GOALS**
 - Number one in country for LEED and Energy Star
 - Launch Year Two of the HGOC: Increase participation
 - New website: **www.houstongoc.org**
 - Participation in DOE's Better Buildings Challenge
 - Committed 30 million square feet (7 million municipal)
 - 20% energy reduction by 2020



Sustainable Food Policy/Initiatives

City Gardens and Farmers Market Initiative

- Downtown Vegetable Gardens (PWE, Tranquility Park, Permitting Center)
- City Hall Farmers Market
- Healthy Houston Initiative
 - Childhood obesity
 - Public Land Community Allotment Gardens
 - Food deserts



**CITY HALL
FARMERS MARKET**



Mayor Annise Parker



A CAPRA Accredited Agency



Houston Drives Electric

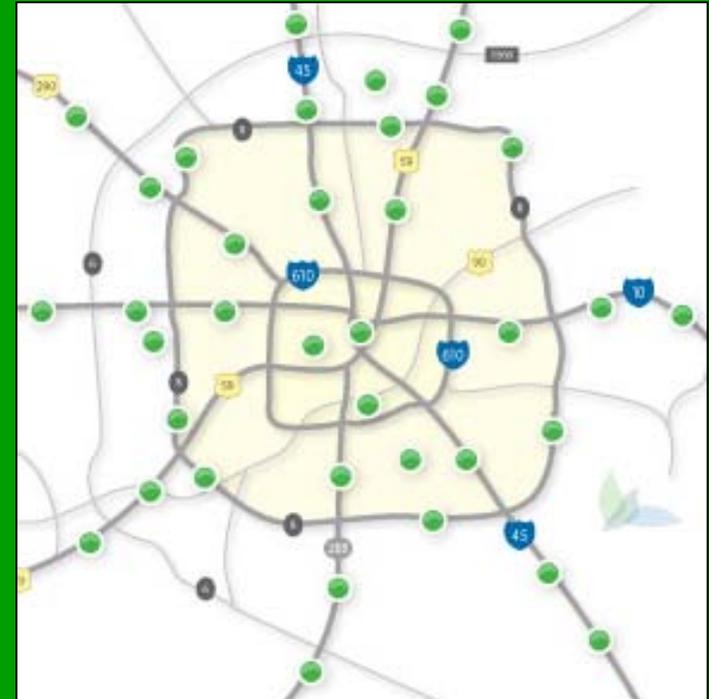
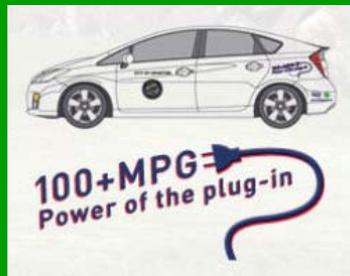
The City of Houston's green transportation initiative dates back to 2002, when the city received its first two Toyota Prius Vehicles. Since then, our light duty passenger fleet has become over 50% hybrid. Houston has the 3rd largest municipal hybrid fleet in the nation.



Houston Drives Electric

www.greenhoustontx.gov/houstondriveselectric

ecotality™



Houston Drives Electric

City of Houston grants/partnerships result in:

- **Conversion** of 15 City vehicles to Plug-in Hybrid EVs; Purchase of 25 Nissan Leafs for City Fleet
- **Planning for Future:** Micro-Climate Planning Process and Deployment Plan
- **Charging Station Infrastructure:**
 - Grant funded: Installation of 30 municipal and 30 public EV charging stations
 - Private sector funded: NRG EV Services (eVgo) 100 chargers; ECOtality 200 chargers
- **Education:** Launch of new website
- **Consumer Incentives:** 24 hour (or less) streamlined/online permitting



Bike Share

Bike Share comes to Houston

- Downtown Pilot begins May 2
- Kiosks at City Hall, Market Square, GRB: 3 kiosks, 18 bikes
- Expansion to 20 kiosks, 200 bikes by end of 2012
- Membership driven: One day, one month and annual memberships
- Program run by new non profit: Houston Bike Share
- Operation and Maintenance donated by Bike Barn



HOUSTON  *cycle*

Awards and Grants

Awards/Articles

- Mayor Parker and Houston won 1st Place in USCM 2011 Climate Protection Awards Program for Green Building Initiatives
- Articles in *NY Times*, *The Atlantic*, *Fortune*, *Time*, *Texas Tribune*

Grants

- **\$23 million Department of Energy:** REEP program
- **\$1.3 million ARRA SECO:** emergency solar generators
- **\$1 million SECO:** wind turbines, solar demos at Permitting Ctr
- **\$873k SECO:** municipal EV charging infrastructure
- **\$500k SECO:** Motor Pool, EVs
- **\$423k EPA Climate Showcase:** Bike Share, EVs
- **\$400k Project EV:** public EV charging infrastructure
- **\$100k Department of Energy:** streamlining solar permitting and interconnection processes
- **\$25k USCM:** local non profits





**Take the Challenge
to Save Water**

April 2012

www.mywaterpledge.com

HOUSTON
GOES ~~DARK~~ SMART



Lights Out Houston April 26





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