



Mayor Annise D. Parker

Sustainability Update

Texas Association of Environmental Professionals | September 16, 2015





SUSTAINABILITY
TOOLS FOR
ASSESSING &
RATING COMMUNITIES

The STAR Community Rating System is the first national framework to measure sustainability at the city or county scale and provide a tracking system to help local governments measure progress towards achieving community sustainability goals.



BUILT ENVIRONMENT
Quality, Choice & Access
Where We Live, Work & Play

CLIMATE & ENERGY
Increase Efficiency, Reduce Impact

ECONOMY & JOBS
Quality Jobs, Shared Prosperity

EDUCATION, ARTS & COMMUNITY
Vibrant, Connected & Diverse Culture



EQUITY & EMPOWERMENT
Inclusion & Access for
All Community Members

HEALTH & SAFETY
Strong, Resilient & Safe

NATURAL SYSTEMS
Protect & Restore the
Resources of Life

STARcommunities.org

STAR Community Rating System

Goal Areas & Objectives are mapped and rated in the online system, helping local leaders set goals and measure progress across areas.

Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health & Health System	Invasive Species
Compact & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Attainment	Environmental Justice	Emergency Prevention & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
Infill & Redevelopment	Resource Efficient Buildings	Targeted Industry Development	Social & Cultural Diversity	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure	Workforce Readiness		Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	

Transportation

- **Houston Drives Electric**
- **4th largest municipal hybrid fleet in the nation**
- **Houston Fleet Share – EV car sharing for employees**
- **Anti-idling policy for municipal vehicles**



Transportation

- **Houston B-Cycle – bike share**
- **Bicycle Master Plan** www.houstonbikeplan.org
- **Park Connector – downtown cycle track**









Bayou Greenways 2020

- 1,500 additional acres of greenspace and parkland, uniting 9 bayous

- 150 miles of connected, continuous, safe, off-street trails

- 6 out of 10 Houstonians will live within a 1.5 miles of the trails

- Mitigates stormwater runoff, flooding, enhances water quality

- \$215 million project (PPP)



Sustainable Food Policy/Initiatives

- City Gardens and Farmers Market

CITY HALL FARMERS MARKET

- Healthy Houston Initiative

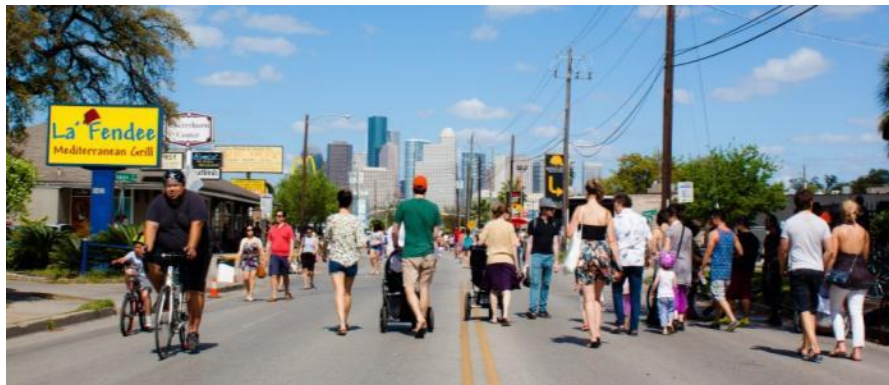
- Sunday Streets

Oct 4 – Nov 1 – Dec 13

- Food desert identification

- Healthy Corner Store Initiative

www.gohealthyhouston.org





Water Conservation Plan

City of Houston

Effective September 2014 through May 2019



YOUR CAP WEEKLY USAGE SUMMARY

CITY OF HOUSTON
UTILITY CUSTOMER SERVICE
Public works & engineering department

MY ACCOUNT | FEATURES | HIGH BILL ASSISTANCE | OTHER RESOURCES

CONSUMPTION AWARENESS PROGRAM (CAP)

YOUR CURRENT BILLING CYCLE USAGE

Usage	5000 Gals	Your current usage may include unbilled usage from the previous billing cycle. Click here for more information.
Days of Usage	15	
Usage Charge	\$58	

PROJECTED USAGE AND CHARGE FOR YOUR NEXT BILL

Usage	5000 Gals	Your projected usage and charge is projected through the end of the billing cycle and may vary from your actual bill. An average billing cycle is 28 - 32 days.
Days of Usage	15	
Usage Charge	\$58	

USAGE HISTORY FOR THE PAST 18 MONTH PERIOD

	Usage (GALS)	Charge
Highest	9000	\$96.53
Average	4000	\$44.15
Lowest	3000	\$21.94
Neighborhood Average	4550	\$44.15

Your neighborhood average is based in the average consumption of 488 single family residential homes in your neighborhood households. This average is only available to single family residential customers.

[Log on](#) to your account to track your usage and associated costs down to hourly intervals.

YOUR WEEKLY WATER USAGE

THIS WEEK - STARTING 4/21/2013							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Usage (Gals)	250	300	400	500	280	400	420
Interval (Days)	1	1	1	1	1	1	1

LAST WEEK - STARTING 4/14/2013							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Usage (Gals)	240	250	300	400	380	300	320
Interval (Days)	1	1	1	1	1	1	1

Interval days represents the interval when your meter was read

JOHN B. SMITH
123 ABC ST.
HOUSTON TX, 7700
LAST 4 DIGITS OF ACCT: 123

[Log on](#) to manage your account

CURRENT BALANCE

AMOUNT DUE	\$58.90
DUE DATE	04/25/2013

Your account is delinquent. Please pay the total amount due.

NOTIFICATIONS

- You have 1 leak alert.
- You have two usage notifications.

RESOURCES

- What is CAP?
- Find a leak.
- Understand your high usage.
- Cost saving solutions.

NEW FEATURES

Want to switch to paperless bills? **eBill** It's Fast & Free!

24/7 Self Service Instant and Convenient Account Service, Drainage Charge, Bill Payment, Water Usage

Usage Alerts! Receive email, text, phone, or mobile app high usage alerts before it becomes a high bill issue.

[Download on the App Store](#) [GET IT ON Google play](#)

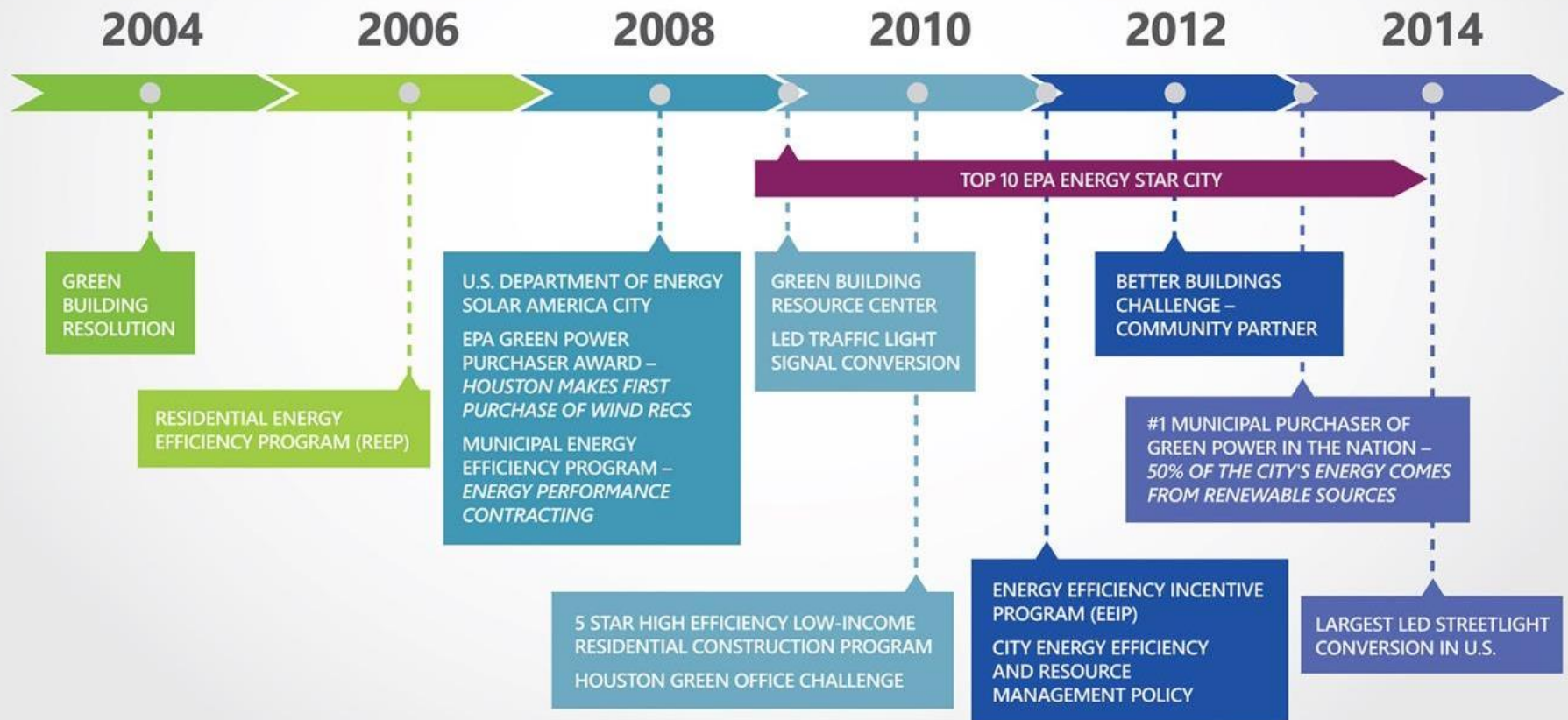
Contact Us: www.houstonwater.org | Use Chat | customerservice@houstonwater.org
713-371-1205 (Pay by phone) | 713-371-5400 (Contact center)

CITY OF HOUSTON

waterworks

EDUCATION CENTER

Municipal Energy Efficiency Programs



Building and Energy Codes

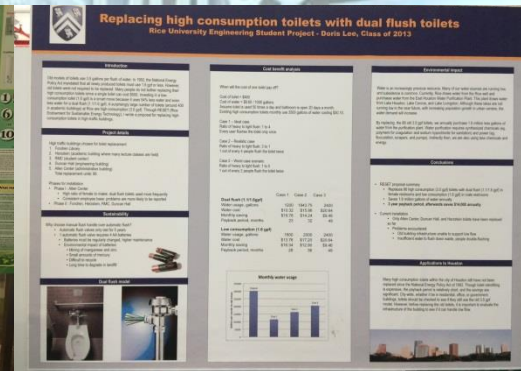


- **Residential Energy Code**
- **Solar ready homes for new construction**
- **Tiny House Development Guideline**



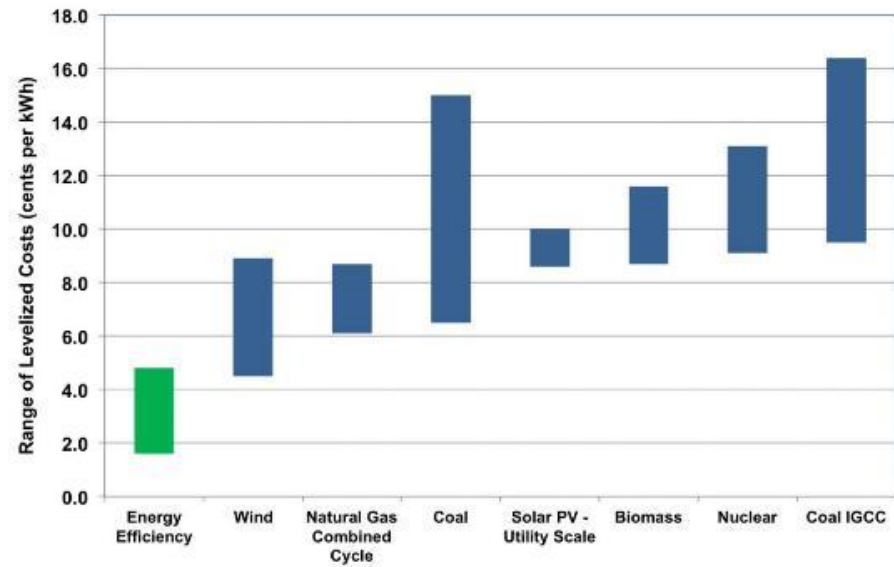






Motivations

- **Economic Investment**
- **Energy Use**
- **Water Use**
- **Energy-Water Nexus**
- **Competing Water Issues**
- **Air Pollution**
- **Energy Efficiency Resource Standards (EERS)**
- **Energy Efficiency is cheaper than other sources**



*Notes: Energy efficiency program portfolio data from Molina 2014; All other data from Lazard 2014.

Municipal Benchmarking Efforts

- City of Houston released energy benchmarking data for +5 million square feet of municipal buildings
- Interactive map displays building information and 2013 site EUIs
- Website provides information and resources about EE and benchmarking best practices



www.HoustonCityEnergyProject.org

Better Buildings Challenge

Goal: 20% energy savings by 2020, baseline 2008

- **30 million square feet committed**



- **Better Buildings Accelerator Programs**
 - **Energy Data Access Accelerator**
 - **Energy Savings Performance Contracting Accelerator**



Houston Green Office Challenge

Tenants: Houston Green Office Challenge

Property Owners & Managers: IREM® Sustainable Property Challenge



- **Recognizes high performers**
- **Encourages action through voluntary program**
- **Allows city to assess needs of market and test incentive initiatives**
- **Inspires management and tenants to work together on sustainability initiatives**

www.HoustonGOC.org

Existing Building Energy and Water Efficiency

OPTIMIZING BUILDING PERFORMANCE: 4 COMPONENTS



BENCHMARKING

Measuring building energy and water efficiency.

Building owners track and report their energy and water usage annually in ENERGY STAR® Portfolio Manager, a free online tool.



TRANSPARENCY

Track use trends to drive improvements in building efficiency.

Building owners share energy and water use data with the City utilizing the ENERGY STAR® Portfolio Manager system.



BUILDING AUDIT

Identify and quantify opportunities to reduce energy and water use.

Building owners submit a summary audit report that certifies an energy and water audit was completed.



TRAINING

Workforce Development: Increase capacity of operators through training

Building owners document that the facility is operated by a qualified individual.

PROJECTED SAVINGS^[1]



805,476 TONS
OF CARBON EMISSIONS



\$112 MILLION
ANNUAL ENERGY BILLS

COMMERCIAL,
INDUSTRIAL AND
INSTITUTIONAL
COVERED
BUILDINGS



> 50,000 FT²



MUNICIPAL
COVERED
BUILDINGS

> 25,000 FT²

There will not be a requirement for a minimum score, and the City is not proposing that capital improvements be made to the covered building stock.

PACE Financing

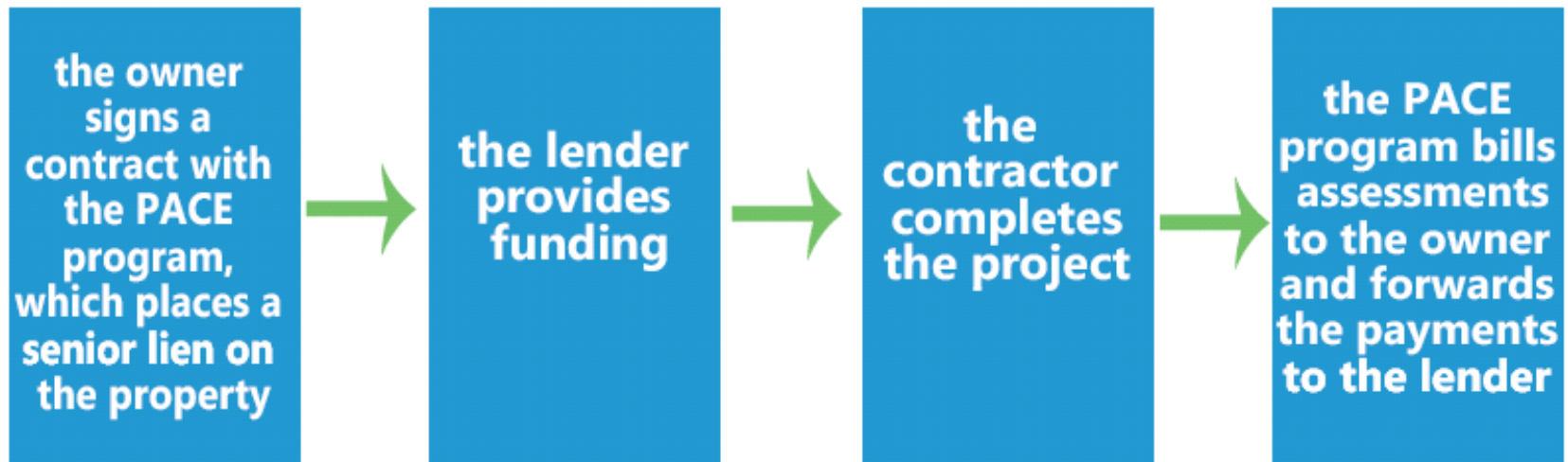


How it works

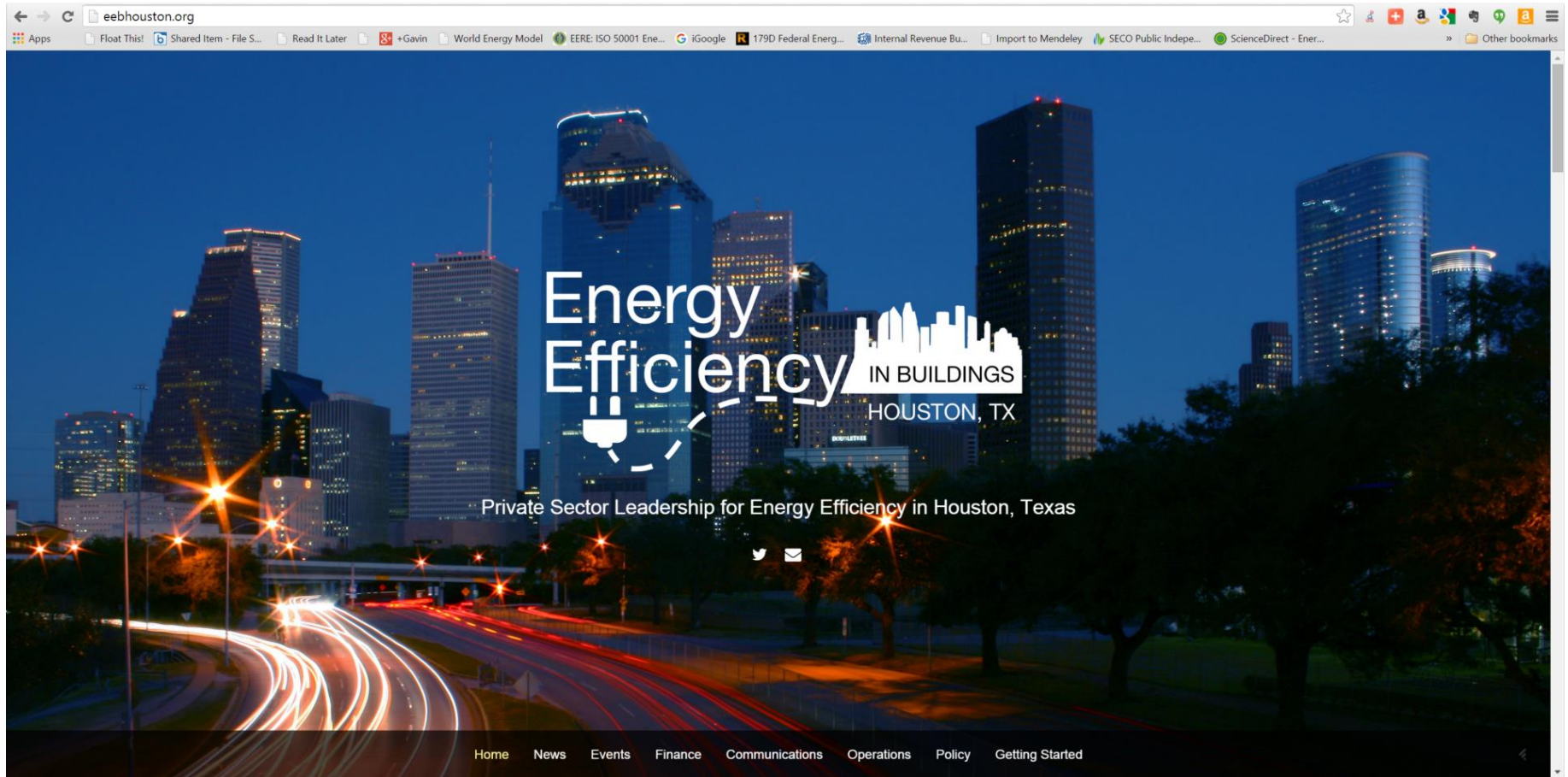
A Building Owner:



If the owner, building and project all meet PACE requirements:



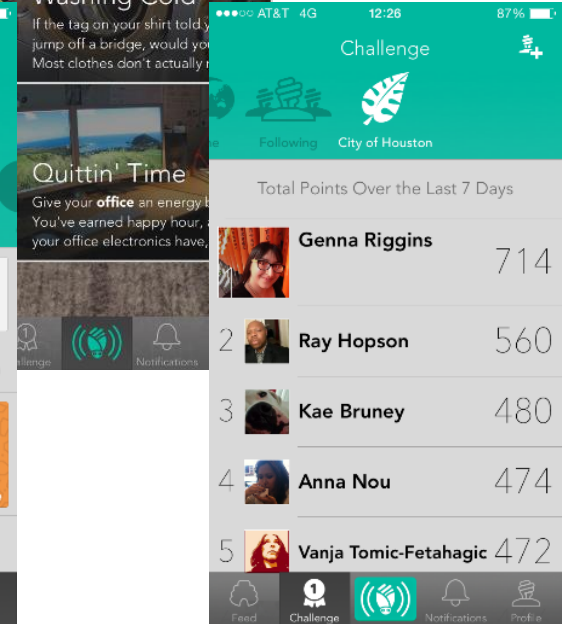
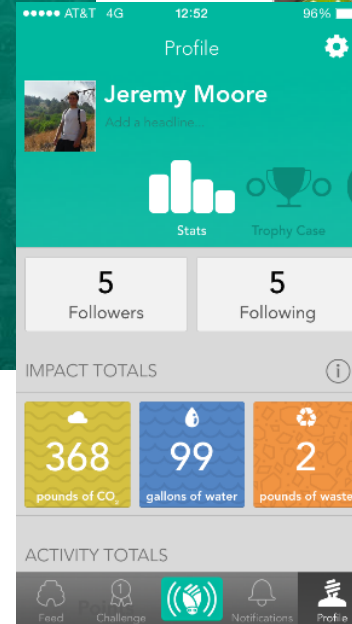
EEB Houston



www.EEB Houston.org

GreenHouston App

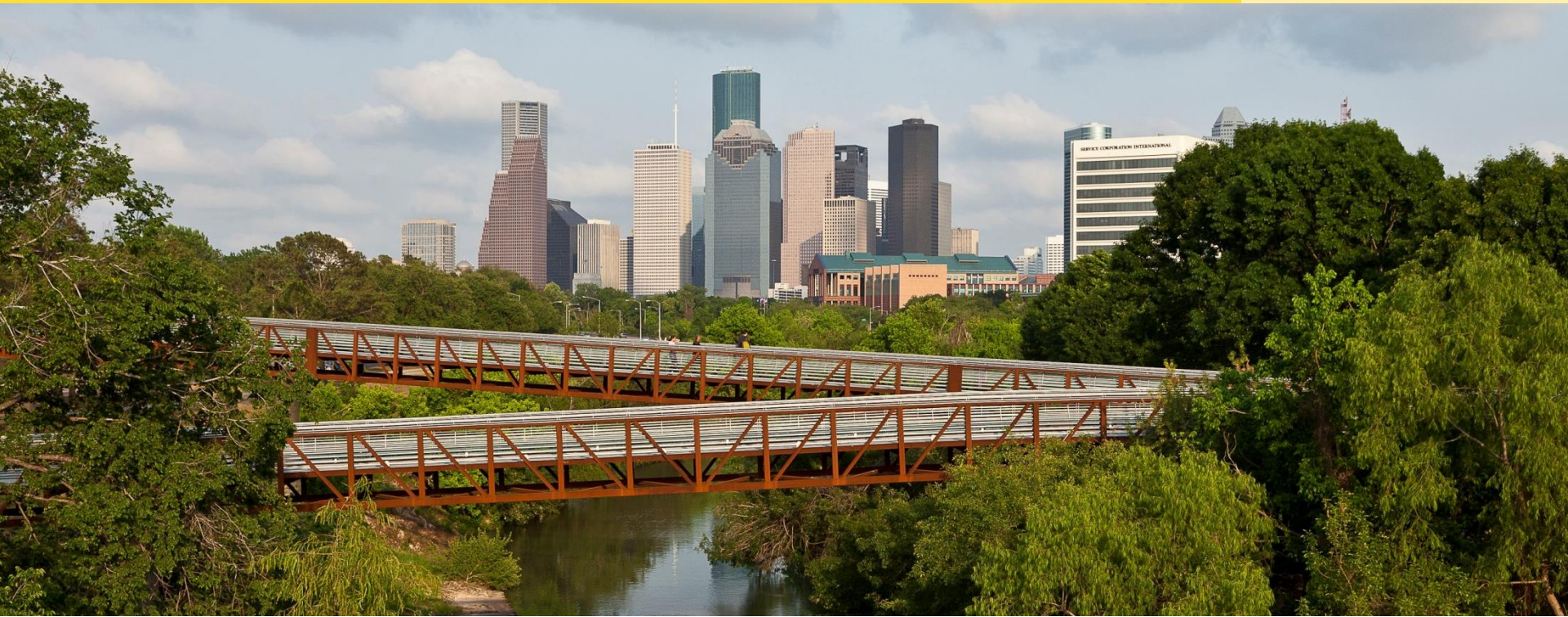
- Encouraging individual actions
- Actions for the home and office
- Gamification-friendly competition with friends, family, coworkers



1. Buzz a pin

2. Post on social media

3. Raise your score!



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www.greenhouston.tx.gov
www.houstongoc.org



Mayor Annise D. Parker

