

**City of Houston Sustainability Update
Presented by ARA Director Tina Paez, on Behalf of Mayor Sylvester Turner
Greater Houston Environmental Expo
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Climate Change:

In both Austin and in Washington, DC, cities are front and center in virtually every public policy debate – from immigration to health care to school financing to tree trimming. On issue after issue, mayors and cities are taking action to protect the programs and policies that make our communities safe, healthy, and sustainable. Climate change is no exception.

Immediately after President Trump announced his intent to withdraw the US from the Paris Climate Agreement, Mayor Sylvester Turner helped gather support from over 400 “Climate Mayors” representing 65 million Americans, to adopt and uphold the commitments to the goals in the Paris Agreement. As Co-chair for the [Climate Mayors](#), Mayor Turner is working with his fellow leaders to find new ways to meet current climate goals, push for new action to meet the 2 degree Celsius target, and create a 21st century clean energy economy.

Houston has chosen to lead by example through our own municipal operations and show how meeting the Paris agreement reductions is a smart financial decision. By reducing our greenhouse gas emissions by 35% since 2007 and powering nearly 90% of municipal operations with solar and wind, Houston is living proof that large, industrial cities can have a robust economy and fight climate change.

2017 City of Houston Sustainability Accomplishments:

Green Power Program:

As the 4th largest city in the United States, Houston uses a lot of power. The goal of our Green Power Program is to show that if a City the size of Houston can make the business case

to one day reach 100% green power, anyone can. In FY 2017, the City of Houston used nearly one billion kilowatt-hours (kWh) of green power (solar and wind), which represents almost 90% percent of our total energy consumption. As a result, for the 3rd year in a row, Houston was named the #1 municipal user of green energy in the nation by the United States EPA. Houston is also #7 on the EPA's overall Top 100 green power users. By investing in green power, the City hopes to drive further investment and development in the renewables market and help make green power even more affordable and accessible for everyone.

Solar Power Purchase:

Our biggest news for 2017, was the launch of the City's power purchase agreement (PPA) for a 50 MW solar facility in Alpine, TX in April, just in time for Earth Day. This represents just over 10% of the City's power consumption and includes buildings such as the Houston Zoo, the passenger terminals at Intercontinental Airport, 611 Walker, and some of our wastewater treatment facilities. In exchange for upping the PPA from 30 to 50 MW, the overall contract price was reduced by 8%, resulting in an estimated \$40 million of savings over the 20-year term of the PPA.

PACE (Property Assessed Clean Energy) Program:

In 2016, Houston created the first municipal Property Assessed Clean Energy Program (PACE) to provide an additional tool for Houston property owners to finance energy efficiency, renewable energy, and water conservation projects. This past June, we announced Houston's first PACE project which, at just over \$2 million, was the largest PACE project in Texas at that time.

Ongoing Sustainable Initiatives:

Energy Efficiency:

Since 2004, the City has required all new buildings to be LEED Certified. We currently have 37 LEED buildings with plans to add more through 2020. To date, the City has invested \$70 million in energy efficiency retrofits: 6 million square feet of retrofitted City facilities are expected to achieve guaranteed energy use reductions of 30%, saving over 22 million kWh of electricity every year. The City's most recent retrofitting projects were in the Parks and Recreation Department and in the Library Department where we retrofitted 18 libraries.

Sustainable Fleet:

Houston has the 4th largest municipal hybrid fleet in the nation. Approximately 50 % of the City's non-specialty, light-duty fleet have been replaced with hybrid vehicles to reduce current and future maintenance costs, increase vehicle reliability, and decrease emissions. Overall, about 11.5% of our fleet is green and we hope to use funding from the VW settlement to add more alternate fuel and electric vehicles to our fleet.

The City of Houston was also among the first municipalities in the nation to use electric vehicles in our municipal fleet-share program. The pool-vehicle program has seen a 50% increase in use of vehicles placed in the program, meaning more needs are met with fewer vehicles. 44 older vehicles have been sold due to the increased efficiencies, and 84 vehicles reassigned. The City's use of EV and hybrid vehicles have also resulted in annual savings compared to the cost of running internal combustion engine vehicles.

LED Lighting Conversion Program:

In 2014, at the City's request, CenterPoint began converting ~175,000 streetlights to LED technology. This project is intended to reduce the City's streetlight energy usage by

approximately 50 percent, while reducing the City's greenhouse gas emissions by 5 percent.

Although the project was supposed to take several years, thanks to overwhelming support from residents asking for lighting to be installed in their neighborhoods and a push to light up the city in time for the Super Bowl, CenterPoint is ahead of schedule.

The Public Works Department also finished replacing the incandescent bulbs at all 2,450 signalized intersections with LEDs and the City is now realizing over \$3.6 million a year in savings.

Contact GreenHoustonTX!

You can learn about all of these projects and more on our website – www.greenhoustontx.gov – or follow us on Facebook and Twitter @GreenHoustonTX.