

COMMUNITY PARTNER

CITY OF HOUSTON



COMMUNITY SIZE

Large Urban

GOAL

To engage the local community to reduce energy consumption in 30 million square feet of buildings by at least 20 percent by 2020 and become the nation's leading city for the number of ENERGY STAR and LEED certified buildings

APPROACH

Leverage existing participant relationships through an ongoing community outreach program and encourage them to strengthen their commitment to reduce energy consumption

INITIATIVE LAUNCHED

2010

Overview

In order to meet the City's energy reduction goal, Houston reached out to participants of their existing community outreach program called the Houston Green Office Challenge (HGOC) and encouraged them to strengthen their commitment to reduce energy consumption by offering increased public recognition.

The City of Houston launched the HGOC in 2010. Houston partnered with ICLEI-Local Governments for Sustainability and the Clinton Climate Initiative to develop the HGOC and recruited a number of private and non-profit organizations as HGOC sponsors. The HGOC helps participants move towards environmental sustainability and, in some cases, towards third-party green building certification through the ENERGY STAR and USGBC LEED rating systems. The program invites commercial property managers, building owners, management districts, and office tenants to increase their environmental and economic performance in the areas of energy conservation, waste reduction, water efficiency, transportation, and property management/tenant engagement. As part of the HGOC, the City of Houston provides training opportunities and other resources, including financial incentives, to assist participants in meeting the energy reduction goals of the HGOC. It is a friendly competition that acknowledges participants for their achievements through mayoral and media recognition. Each year Houston holds an awards reception where the Mayor announces winners in various HGOC categories and highlights the award winners on the HGOC website.

Houston built on the success of their existing HGOC program by encouraging participants to expand their energy efficiency efforts and participate in the Better Buildings Challenge. Houston believes this combined approach will enable the City to meet its energy reduction goals of reducing energy consumption in 30 million square feet of buildings within the local community while also strengthening HGOC participants' commitment to energy conservation.

In addition to the HGOC and Better Buildings Challenge, the City is leading by example in their energy conservation efforts by implementing demand response, retro-commissioning, and behavioral change management programs. Houston has a robust energy savings performance contracting program and adopted a Green Building Resolution which set a target of LEED Silver certification for new construction and major renovations of City-owned buildings.

Houston's Playbook



Planning

A number of meetings were held to both garner support for the HGOC and Better Buildings Challenge and to encourage participation in the two programs.

For meetings with internal stakeholders of HGOC, the City convened sponsors, non-profit partners, and other City staff to discuss the educational structure and scorecard for the program. The scorecard helped to lead interested participants to ENERGY STAR and LEED certification. The city also held meetings in order to better align HGOC with the Better Buildings Challenge. Based on feedback obtained at these meetings, the City modified parameters to the existing Energy Efficiency Incentive Program in order to encourage participation in both programs.

- **Tools:**
 - [HGOC Community Partner Invitation](#)
 - [HGOC Community Partner Meeting Agenda](#)

Policies

The City of Houston has enacted a number of policies that demonstrate a commitment to energy efficiency within government operations and encourage the private sector to follow suit.



- Approved on June 28, 2009, [Executive Order 1-17](#) establishes the Environmental Coordinating Council, which places environmental staff within all City of Houston operating departments to coordinate environmental issues and activities across departments.
- Passed on December 31, 2011, [City Energy Efficiency Policy \(Administrative Procedure 7-1\)](#) promotes energy efficiency in the operation of the basic facilities, services, and installations needed for the functioning of the City and establishes a sustainable culture for all City operations.
- On June 23, 2004, Houston adopted the [Green Building Resolution](#),

which set a target of LEED Silver level certification for new construction, replacement facilities, and major renovations of City of Houston-owned buildings and facilities with more than 10,000 square feet of occupied space.

- Houston updated their [Commercial Energy Conservation Codes](#) – As of September 2, 2011, commercial buildings and structures in Houston are required to comply with 2009 IECC or 2007 ASHRAE 90.1.

Partnerships



The HGOC brings together a network of public, private, and non-profit partners to help catalyze participation among property managers, building owners, management districts, and office tenants. Some partners approached the City wanting to support this program as sponsors, while others were contacted by the City because they had previously vocalized interest in supporting a City-led environmental initiative. Non-profit partners leveraged their connections to encourage businesses to register for the program and helped generate excitement for the Challenge. More than 375 buildings and tenants, representing approximately 75 million square feet, participated in the first year of the HGOC.

HGOC Partners – developed the educational structure and scorecard, helped with outreach, assisted in setting the parameters for the Energy Efficiency Incentive Program, led the implementation of the program, and provided technical assistance. These partners were involved from the beginning of the development process for HGOC and helped shape the program to fit Houston’s needs.

HGOC Community Partners – helped with outreach and promotion of the program within their networks and provided information at education meetings. These partners were involved after the launch of the program and helped bring the program to the community.

HGOC Management Districts – helped with outreach and promotion of the program within their districts and hosted education meetings. The management districts were involved in engaging the companies and buildings located within their districts to drive up participation. The HGOC team gave recognition to the management district with the highest participation.

HGOC Sponsors – provided funds for the program, provided information at education meetings, and offered free services (e.g. energy audits) to participants. [Sponsors](#) ranged from property management companies, waste and recycling businesses, energy companies, and the utility, and their logos are included on the HGOC webpage.

- **Tools:**

- [Sponsor Education Meetings](#) – These presentations, given by various program sponsors, focused on participant education around energy efficiency and sustainability topics. In Year 1, sponsors and non-profit partners delivered pertinent information at all in-person education meetings. These presentations were made to all six districts participating in the program. In Year 2, a combination of in-person education/idea-sharing meetings as well as HGOC- and Better Buildings Challenge-focused webinars will be offered to all participants. Recordings of the webinars will be available on the website and presentations will be uploaded to the program as well.



Houston uses the HGOC as a platform to reach out to its local community by leveraging a wide variety of strategies from focused meetings to social media.

Leading by Example: – To reach internal staff and stakeholders, the City formed both an Environmental Coordinating Council and Green Teams to help deploy the City’s cross-departmental efforts to reduce energy consumption in City owned buildings.

The Council meets monthly and is comprised of City employees from each of the City’s several departments. The Council responsibilities include: enhancing cross-departmental environmental education, coordinating environmental matters communications, promoting the City’s environmental accomplishments and responsibilities, and identifying and supporting all departments to access external funding opportunities for environmental projects.

City of Houston Green Teams is an initiative to foster sustainable behavior change to reduce energy consumption and environmental impact in City office buildings. Using the HGOC tenant scorecard as a framework for the green teams, this will help further participation in Year 2 of the HGOC and help with the City’s Better Buildings Challenge goals.

■ **Tools:**

- [Policy Establishing the Environmental Coordinating Council](#)
- [Sample Environmental Coordinating Council Meeting Agenda](#)
- [Guidance on How to Create a Green Team](#)

Website – Houston developed a HGOC website and dedicated a section of that website for interested organizations to officially join the HGOC challenge.

■ **Tools:**

- [Houston Green Office Challenge](#)
- [Registration Portal for Green Office Challenge](#)

Marketing Materials – To reach external stakeholders, Houston developed a number of materials to promote the HGOC throughout the community.

■ **Tools:**

- [Green Office Challenge Brochure](#) – Includes an invitation from the Mayor, explanation of how the program works, and next steps for participation.
- [Green Office Challenge Newsletter](#) – Includes program updates as well as news and links for related programs.

Engagement Strategies – Through the HGOC website, Houston provides a number of ideas and strategies that building owners, property managers, and tenants can employ to reduce energy use in their buildings.

■ **Tools:**

- [Outreach Strategies](#) – Houston offers a dedicated portion of their HGOC website to explaining strategies organizations can employ to encourage their employees to go green.
- [Property Management Engagement](#) – Houston has also dedicated portion of their HGOC website to providing methods building owners can engage their property manager to reduce the energy use.

Public Relations Materials – Houston issued press releases announcing the inaugural HGOC and the City’s participation in the Better Buildings Challenge. They also utilize social media to engage participants in the HGOC and build support for the HGOC and Better Buildings Challenge.

■ **Tools:**

- Press Release: [Mayor Annise Parker Announces Inaugural HGOC.](#)
- Press Release: [Mayor Annise Parker Announces Houston’s Participation in the Better Buildings Challenge.](#)
- [Facebook](#) and [Twitter](#) accounts allow the program to post updates, tips, and tricks.



Financing

To address the need for financing, the City of Houston set up a commercial building incentive program for energy efficiency retrofits and is connecting the public with the incentives that local utility companies offer. The City is also leading by example with its use of performance contracting.

- [Ordinance No. 2011-1167: Leadership in Energy and Environmental Design Tax Abatement](#) provides new commercial facilities seeking LEED Certification a partial tax deduction. The deduction can be taken for up to 10 years at a percentage based upon the level certification actually obtained.
- [CenterPoint Energy Business Efficiency Programs](#) – CenterPoint Energy, Houston’s largest electric transmission and distribution utility, provides a number of energy efficiency incentives for its commercial and industrial customers, which are promoted through the HGOC.
- [LEED Incentive Program](#) – LEED projects which achieve certification qualify for a graduated rebate through the City of Houston for their Quick Start permitting fees levied during the commercial plan review process. Within 90 days after construction, when LEED certification is achieved, the applicant must present the certificate from USGBC to confirm the level of achievement. The portion of fee rebated (shown in parentheses) is based on the level of achievement – certified (25%), silver (50%), gold (75%), or platinum (100%).
- [Energy Efficiency Incentive Program](#) – Houston launched the City's first Energy Efficiency Incentive Program (EEIP) for commercial buildings. The EEIP provides financial incentives of up to 60% of expenses incurred to help office building owners, property managers, and tenants reduce energy consumption and increase the economic performance of their buildings. Applicants must join the HGOC to be eligible for the program. Houston utilized approximately \$3 million of its Energy Efficiency Conservation Block Grant funds to seed the program.
- **Tools:**
 - [LEED Incentive Program One Pager](#)

- [Quick Start Program](#)
- [Energy Efficiency Incentive Program Application](#)

Technical Resources



Implementation Assistance – Houston provides tools, resources, and assistance to those interested in building energy efficiency through its Green Building Resource Center. In addition, organizations that participated in the first year of the HGOC received assistance in setting up a Portfolio Manager account and energy assessments from HGOC sponsors.

The mission of the [Green Building Resource Center](#) is to enable the public to experience and learn more about energy efficient and sustainable building. The physical Center is located in the City of Houston's Permitting Center. Over 50 displays, many interactive, free samples of green materials, and a library of information are available. In addition, an online resource provides information on various aspects of green building including [steps toward improved energy efficiency](#).

[Quick Start](#) is the City of Houston's Public Works and Engineering's expedited plan review process for large commercial design projects and those that are registered as a LEED building.

Training – Houston formed the HGOC Challenge Team comprised of internal City staff who offer participants help with events, Portfolio Manager, and other areas that participants might inquire about, including connecting participants with industry experts. For example the HGOC Challenge Team is providing a number of training opportunities and educational resources to HGOC participants including the following:

- Assistance Planning a Tenant Training Event – Participating buildings in the Green Office Challenge can contact the HGOC team for assistance in planning a training event in a participant's building.
- A dedicated portion of their HGOC website that lists [energy reduction strategies](#) for building owners to reduce the energy use in their buildings.
- A free [Environmental Behavior Change Workshop](#) geared towards a diverse audience including businesses, schools, non-profits, and the public and offered in partnership with the Houston Independent School District.
- One on One Portfolio Manager Trainings – Participants who request additional help setting up a Portfolio Manager account can ask for one-on-one assistance from the HGOC team to walk them through this process. Participants are asked to gather information prior to the meeting, and trainings occur in person or over the phone.
- **Tools:**
 - [Webinars & Other Resources on HGOC's Website](#)
 - [Sample Preliminary Energy Assessment for HGOC Participant](#)
 - [Instructions on Sharing Facilities through Portfolio Manager for the HGOC](#)



Data Management

Using data from the HGOC master account in Portfolio Manager, the City of Houston observed trends in the energy use from 2008 to 2011 of participating buildings in the program. The City created preliminary reports of high performers and used them to recruit local property managers to join the Better Buildings Challenge.

Some participants were not able to create Portfolio Manager accounts in the first year but are planning to do so in Year 2 of the HGOC. The City has also approached these participants to consider participating in the Better Buildings Challenge.

Access to Data – Each HGOC building has an ENERGY STAR Portfolio Manager account which can be accessed at any time. Participants upload electricity, natural gas, and water meter data so that they may be tracked over time.

Data Tracking and Performance Measurement – Green Office Challenge Tenant Scorecard generates a baseline score for the tenant and then outlines actions that a tenant can take to improve that score (it automatically generates a score as the tenant fills it out) and make their office “greener.” For Year 2 of the HGOC, the City opted to use version two of the ICLEI Green Business Challenge tool, which allows tenants to track their own energy consumption if they are submetered and receive reports on their electricity and natural gas usage.

- **Tools:**
 - [Green Office Challenge Tenant Scorecard](#)



Public Recognition

Houston publicly recognizes commercial property managers, building owners, management districts, and office tenants for their achievements through mayoral and media recognition.

- **Tools:**
 - [2011 Challenge Year Overview webpage](#)
 - [Press Release: Mayor Annise Parker Announces Green Office Challenge Awards](#)
 - [HGOC Case Study Highlighting Behringer Harvard](#)
 - [HGOC Case Study Highlighting SmartOES](#)
 - [HGOC Case Study Highlighting Total Gas and Power](#)