

Energy Efficiency



IN BUILDINGS HOUSTON, TX

<http://eebhouston.org/>

EEB Houston - Market Engagement Snapshot

Progress and achievements to date - October 2016

Energy Efficiency in Buildings (EEB2.0)

EEB2.0 is the second phase of WBCSD's EEB project, and is designed to overcome market barriers and create a replicable process to bring about radical improvements in energy efficiency in buildings. EEB provides markets with an indispensable neutral local platform for cooperation and action.

There are currently 10 EEB market engagements around the world. WBCSD and its partners aim to increase the number of engagements to 60 by 2020.

There are many reasons to get involved in EEB. Read [Why get involved in a market engagement?](#)

The WBCSD has developed an EEB methodology based on its experience from 10 engagements. The [How to carry out market engagements?](#) document details this methodology and shares good practice.

www.wbcSD.org/buildings.aspx

EEB Houston Key Facts

- Launched: March 2015 (EEB Lab in October 2014)
- Number of technical partner organizations: 40
- Key partners: IREM, BOMA, AEE, ASHRAE and Uptown Houston
- Local Management: HARC

EEB (Energy Efficiency in Buildings) Houston is an ongoing initiative to fulfill Houston's great potential to achieve significant energy and direct financial savings, as well as local economic development, from investment in building energy efficiency.

The initiative is part of the World Business Council for Sustainable Development (WBCSD) EEB 2.0 project, and brings together key local partners that cooperate toward common objectives

Why EEB Houston?

Houston was selected for EEB due to its strong economy, the local need to avoid energy demand exceeding current capacity, and significant potential for greater energy efficiency in buildings.

Key impacts and achievements to date

- Around **US\$ 100 million*** of funds made available for energy efficiency projects in the Houston area
- **Over 50 signatures** from across the building community for letter of support for EEB Houston that has been shared with council members and the mayor
- **Four action committees** - Finance, Building Operations, Policy and Communications - working with short and long-term objectives

* based on PACE-related project pipeline estimates made by the development community. EEB Houston has led work with PACE.

SUMMARY OF EEB HOUSTON OBJECTIVES, BENEFITS & VALUE

EEB Houston Objectives	Benefits & Value for participating organizations	Benefits & Value for Society
<ul style="list-style-type: none"> • To mobilize all relevant actors around a neutral local platform. • To overcome the four identified local barriers to EEB in Houston: <ul style="list-style-type: none"> - lack of awareness - lack of available finance - inadequate building operator capacity - policy complexities and inadequacies 	<ul style="list-style-type: none"> • Networking – each lab participant made 2.7 new contacts on average • Raised awareness – 25% of lab participants increased their awareness of EEB in Houston • New opportunities – participation in the lab led to 40% business opportunities on average • 100% of lab participants found the engagement useful. 	<ul style="list-style-type: none"> • EEB Houston has established itself as a valuable partner to the City of Houston Long-term benefits (not yet realized): • The targeted 30% energy savings would reduce the need for future investment in regional power generation, promote energy independence and reduce greenhouse gas emissions • Almost 20,000 new jobs could be created

THE EEB HOUSTON APPROACH

Following the 3-day EEB Lab in Houston, four action committees and an [Action Plan](#) were developed and launched. The Action Committees each work in a key area with their own short-term and longer-term objectives as part of action plans implemented throughout 2016. The committees are **Finance, Building Operations, Policy** and **Communications**. Each committee has a chairperson and a working group that comprises of building owners, building operators, equipment vendors, building tenants, consultants and the public sector. The Houston Advanced Research Center (HARC) is managing EEB efforts to manage the EEB activities.

Visit the [EEB Houston website \(www.eebhouston.org/\)](http://www.eebhouston.org/) or contact Gavin Dillingham at HARC (gdillingham@harcresearch.org) for further information.

“EEB Houston is providing a great opportunity for the Houston business community by bringing to light the need for more investment in energy efficiency. We have found that business owners can save anywhere from 20-60% on energy costs; EEB’s focus on education will greatly enhance understanding across all markets in Houston.”

- Dan Parsley, President and COO of EES Consulting

“EEB Houston is unique in its ability to harmoniously bring together key market participants from both the private and public sector. Project goals are noble and achievable. While the initial focus is most certainly local, exciting open doors exist for the team to influence and learn from other cities.”

- Jeff Craig, Ascentergy (Finance Committee Chair)

THE EEB HOUSTON ACTION COMMITTEES: PURPOSE, GOALS, AND PROGRESS



Policy committee

Chair: Houston Advanced Research Center (HARC)

Barriers to overcome: Policy complexities and inadequacies that prevent EEB investments. Little or no transparency on energy use.

Purpose: To develop appropriate policies and regulation that can be effectively implemented in a non-regulated market to maintain competitiveness, and promote transparency and market activity.

Objectives

Short-term goals

To support the City of Houston's City Energy Project (CEP) as advisors. The CEP aims to include policies around benchmarking, building audits and operator training that aim to drive EEB investment in the private and public sectors.

Mid-term action plans and goals

An action plan to further the objectives of Houston's EERS, with the expectation of increasing funding significantly, is being developed to overcome a lack of EEB incentives in the Houston market.

The committee will build the case to bring about changes to state data access policies that currently prevent owners of multi-tenant buildings from obtaining whole building energy data without tenant consent.

KPIs & Progress

Providing ongoing support to Houston's CEP.

KPIs

- Number of Public Utility Commission (PUCT) Projects initiated due to EEB Houston activity
- Number of PUCT projects completed that benefit the energy efficiency market in Houston

City of Houston's City Energy Project (CEP) – is a national initiative to create healthier and more prosperous US cities by improving the energy efficiency of buildings.

Energy Efficiency Resource Standard (EERS) aimed at implementing long-term binding energy savings targets in multiple US states by passing new local legislation that promotes energy efficiency.



Building operations committee

Chair: Automated Logic (building automation company)

Barriers to overcome: Building operation in Houston typically takes a reactionary approach rather than one that promotes optimal and efficient operations.

Purpose: To develop the capacity of building operators by ensuring they are appropriately trained and understand how to build an EEB business case to drive owners to action.

Objectives

Short-term goals

To promote building operator training opportunities in Houston.

An inventory of building operator training programs that are currently in Houston or can be brought to Houston is being developed and will become part of a Career Glide Path flow-chart tool.

The committee will also identify how employers can be encouraged to pay for their employees to undergo training programs, and how the training can be incentivized for employees.

Local associations have already been engaged and opportunities will be promoted through the communication's outreach efforts.

Mid-term action plans and goals

An action plan to help building operators make a persuasive case for investment will be developed.

A second action plan will aim to develop and implement appropriate and effective strategies for tenant engagement – both from operator-to-tenant and tenant-to-operator.

KPIs & Progress

Creation of a Career Glide Path flow-chart that will demonstrate a variety of training opportunities for building operators, from low-cost/no-cost options to full certifications.

A video library and training resource library are being developed as a part of the Career Glide Path flow chart.

KPIs

- Metrics to measure the number of newly trained or certified building operators in the region
- Career Glide Path tool interest tracked through inventory visitor numbers



Finance committee

Chair: Ascentergy (energy management company)

Barriers to overcome: General lack of energy efficiency capital in the market. Low awareness of EEB financial opportunities and how to articulate the business case for EEB.

Purpose: To identify financing options and tools and to develop strategies to promote, pilot and scale their use with building owners in the Houston area.

Objectives

Short-term goals

To develop and implement a strategy with the City of Houston to promote the Keeping PACE in Texas program through providing stakeholder support and education – to ensure that potential participants understand how PACE works and how they can participate.

To create case studies that illustrate the business case for EEB.

Mid-term action plans and goals

The committee is developing an action plan to promote the adoption of the ICP certification into the Houston market.

An action plan to create an energy efficiency project planning framework is also being developed (containing project planning checklists, business case templates and other project development tools suitable for any energy efficiency project). This framework will be shared through the communications committee and will help building owners to develop EEB projects in Houston that can be presented to investors.

KPIs & Progress

A subcommittee has been formed and meets regularly to discuss strategies.

Meetings have been held with the City of Houston, the PACE organizations and the EEB finance committee. A PACE Financing District in Houston is being developed and the committee is playing a lead role.

KPIs

- To create 7 new EEB business cases by the end of 2015
- To obtain over 50 stakeholder signatories to the letter of support for EEB Houston (completed)
- Number of ICP underwritten projects in Houston
- Number of attendees at ICP webinars/meetings

PACE (Property Assessed Clean Energy) is an innovative financing program that enables owners of commercial and industrial properties to obtain low-cost, long-term loans for energy-efficiency improvements.

Investor Confidence Project (ICP) certification - is a voluntary energy efficiency project development standardization that developers can follow to enhance financial feasibility and investor confidence that savings will be realized.



Communications Committee

Chair: Social Investment Manager – Environment (Shell Oil Company)

Barriers to overcome: Varying perception of the value of EEB, particularly for Class B & C buildings.

Purpose: To ensure the opportunities and benefits of EEB are appropriately communicated to all stakeholders, with the right message for the right audience.

Objectives

Short-term goals

To develop a website platform where all material produced by EEB Houston can be effectively shared.

Working with other committees to develop various tools, processes and real world case studies.

Mid-term action plans and goals

An action plan is being created to develop and maintain research and papers on the benefits of EEB among research institutes and universities, including a long-term funding strategy.

A second action plan will focus on the development of a long-term communications plan, particularly around public speaking opportunities and outreach, case studies, the development of a speaker's bureau, video and written testimonies from high profile individuals in the Houston market, and social media.

KPIs & Progress

The EEB Houston website was launched in September 2015 – www.eebhouston.org

The site provides information on the project background, project supporters and sponsors, the justification for EEB and resources (such as case studies and tools created by the other committees).

Over 12 case studies have been created.

Speakers bureau meeting system have been set up to enable EEB Houston members to communicate and discuss EEB in the city more easily.

KPIs

- Web metrics to determine the level of activity and interest in the content