

A handbook on creating dynamic local markets for Energy Efficiency in Buildings



EEB 2.0 project members:

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United Technologies (co-chair)

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AkzoNobel

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About WBCSD

The World Business Council for Sustainable Development (WBCSD) is a global, CEO-led organization of over 200 leading businesses and partners working together to accelerate the transition to a sustainable world. WBCSD helps its member companies become more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

WBCSD member companies come from all business sectors and all major economies, representing a combined revenue of more than \$8.5 trillion and 19 million employees. The WBCSD global network of almost 70 national business councils gives members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

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Energy efficiency in buildings is a global issue but needs to be tackled locally

About this handbook

This handbook describes a market-tested, locally-adaptable methodology for collective action to drive energy efficiency in buildings (EEB) at city, regional or national levels. It details how the WBCSD successfully piloted this methodology in 10, varied locations around the world.

We explain the comprehensive processes and steps involved and, importantly, how to bring together the many different groups that comprise the buildings sector. In so doing, this publication serves as an essential guide to anyone who wishes to get involved in stimulating collective, localized action on EEB.

We know that interest in EEB originates from many different perspectives: commercial, academic, sustainable development, policy-making, financing, city planning, power generation and so on.

Whatever the starting point for your interest, we believe this Handbook will contain useful information, ideas and testimonies from those who have witnessed our work.

Above all, we hope it inspires more people to begin local action on what is arguably the most important challenge ever faced by the global built environment.

For more information, please contact Roland Hunziker, Director, Sustainable Buildings and Cities, WBCSD (hunziker@wbcd.org) or

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Foreword



Peter Bakker
President and CEO, WBCSD

Buildings play a critical role in combating climate change worldwide. They use one-third of final energy and create over 20% of man-made CO₂ emissions. By 2050 the International Energy Agency (IEA) estimates we need to reduce CO₂ emissions from buildings by over 80% to achieve the Paris Agreement.

However, given the need to decarbonize existing buildings while also housing the world's fast-growing urban population, this target must be closer to 100%.

This presents a clear opportunity for business to play its part: to meet this target, the IEA states the market for energy efficiency solutions must double from US\$ 100bn in 2014 to US\$ 200bn by 2020.

While clearly a challenge, it is surmountable. The solutions and knowledge exist and they need to be more widely understood and deployed. While everyone agrees on the need to stimulate greater market demand for energy efficiency, the building sector's unique characteristics often impair the level of change that is required. This Handbook outlines the most frequent barriers to wider adoption, and they can all be overcome.

In beginning our Energy Efficiency in Buildings (EEB) Project, our high-level and long-term goal was to create the market conditions to stimulate greater demand by owners, designers, builders, investors and occupiers; and to catalyze and drive collaborative action throughout the sector's value chain. It was important that we achieve this at the local market level, acknowledging that there are both shared and unique factors to be taken into consideration in each area.

In this Handbook you will learn about the replicable methodology for public-private sector engagement that was created and then market-tested across different global locations. You'll discover how each 'market engagement' unifies different interest groups and drives action to meet locally-agreed priorities. And you'll read about some early, tangible outcomes from the EEB Project's unique approach.

EEB recently gained 'Flagship' status in the United Nations Sustainable Buildings and Construction Programme. It is now entering its third phase: EEB Amplify. EEB Amplify is all about scale-up.

The program plans to reach at least 50 local market engagements by 2020. It will attract greater resources from the business community, with help from NGO partners and with co-operation from more civic leaders.

The technology and the solutions for EEB are available today. To achieve wide-scale implementation, we need policy support from local and national authorities, availability of funding – public and private – and local implementation partners to work together.

The Paris Agreement and the adoption of the Sustainable Development Goals (SDGs) have created an irreversible and irresistible pathway to a low-carbon world. Now it is time to turn that ambition into implementation.

Join us in this global effort.

Multiple benefits of energy efficiency in buildings

Until recently, the calculated return on investment for energy efficiency in buildings was limited to the energy saved and associated cost savings. More effort is now underway to understand, articulate, quantify and monetize a wider range of benefits of energy efficiency, including:

- **For building owners and occupants:** improved durability, reduced maintenance, greater comfort, lower costs, higher property values, increased habitable space, increased productivity, and improved health and safety.
- **For governments:** improved air quality, reduced societal health costs, an improved tax base and lower budget variation, higher GDP and enhanced energy security.
- **Utilities:** benefit from cost and operational benefits due to reduced customer turnover, reduced emissions and reduced system capacity constraints.

Source: Extract from Energy Efficiency Market Report 2015, IEA adapted from IEA (2014a), *Capturing the Multiple Benefits of Energy Efficiency*, OECD/IEA, Paris

Introduction

Why energy efficiency in buildings matters

Buildings are collectively the world's biggest energy drain, consuming a third of final global energy output. They also produce around 20% of all greenhouse gas emissions. The numbers are rising as the world's population grows and urbanizes. There is an urgent and increasing need to reduce them significantly, and reverse the rise. While there are obvious environmental and sustainability benefits from rising to the challenge, there are also less-obvious - and potentially huge - economic rewards. According to the International Energy Agency, harnessing the full capacity for energy efficiency could boost cumulative global economic output through 2035 by USD 18 trillion, with related benefits (see adjacent box). But securing all these benefits presents a highly complex and unprecedented international challenge. The buildings sector is highly fragmented, conservative and slow to change. It is typically characterized by:

- multiple groups of stakeholders, with no unifying incentive to prioritize energy efficiency
- wide variations in technical education and energy-efficiency knowledge between individuals and groups
- national and regional differences and inconsistencies in regulatory systems
- economics for new and renovation building projects that often impede viable energy efficiency investment

As well as these factors, the groups who can bring about the required changes are unaccustomed to working together in trusting relationships. In short, all this creates an urgent need for transformative change. Accelerating this change requires a fundamentally different approach.

Introducing the EEB Project

The WBCSD used its unique, catalyzing position to create a global private sector-led project on Energy Efficiency in Buildings. In this project, experts from 11 large corporations piloted and refined a multi-stakeholder engagement model designed to drive action in local markets. This model involves identifying and bringing together public and private sector stakeholders from across a wide spectrum of buildings sector stakeholders. They then participate in a three-day 'EEB Laboratory' to identify priority issues, build dialogue, trust and a shared purpose. Following the EEB Lab, long-term action and coordination is driven by a local EEB Platform. This typically involves participants forming Action Committees to facilitate local market demand and investment in EEB. Platform objectives are typically long-term, but the EEB model is already proving its ability to bring about change and action at the local, city level.

Progress so far

Since 2014, EEB Laboratories have taken place in 10 cities, with EEB Platforms set up in Houston, Warsaw, Jaipur, Jakarta, and Shanghai. Tangible outcomes so far include:

- Contributing to the introduction of a US\$100 million EEB financing program in Houston

- Comparison benchmarking of 56 buildings in Poland for the first time to facilitate new, nationwide energy efficiency performance standards
- Following a recommendation from the EEB lab in Poland, The European Bank for Reconstruction and Development (EBRD) launched a residential energy efficiency financing facility of 200m euros
- Enabling and coordinating private sector input to local regulatory policy in Jakarta
- Setting up a platform for best practice sharing among building sector companies in Jaipur

Importantly, these EEB Platforms typically represent cross-sector, coordinated action covering the entire value chain in their respective local markets; one that is driven and supported by the private sector. The Platforms themselves are therefore powerful vehicles to stimulate action and create greater local investment in EEB.

Next steps: EEB Amplify

Under the name 'EEB Amplify', the WBCSD and its partners plan to scale up this work and reach 50 local market engagements by 2020. This objective has been endorsed by the Sustainable Buildings and Construction Programme of the UN 10 Year Framework of Programmes for Sustainable Production and Consumption (10 YFP SBC). This EEB Handbook is designed to help facilitate that goal. It is for any organization interested in understanding how collaborative, localised, public-private sector partnerships can stimulate and drive EEB adoption.

In Part I, we outline the benefits of participating in a market engagement for different building industry stakeholders; Part II details the EEB Project methodology used across the 10 pilot market engagements (the EEB Laboratory and EEB Platform); and Part III analyses the learning points from these pilots. Each section is illustrated with examples, with general experiences and first-hand testimonies from participants documented.

Market engagement – defined

“Market engagement” refers to a structured methodology of bringing together the ‘building value chain’ locally to identify key market barriers preventing EEB investments and to define an action plan to overcome them. The ‘building value chain’ refers to the many different groups who have an interest in, or could play a part in driving greater uptake, of EEB solutions. These include architects, developers, owners, tenants, banks, city planners, utility firms, policy makers, etc.

Part I

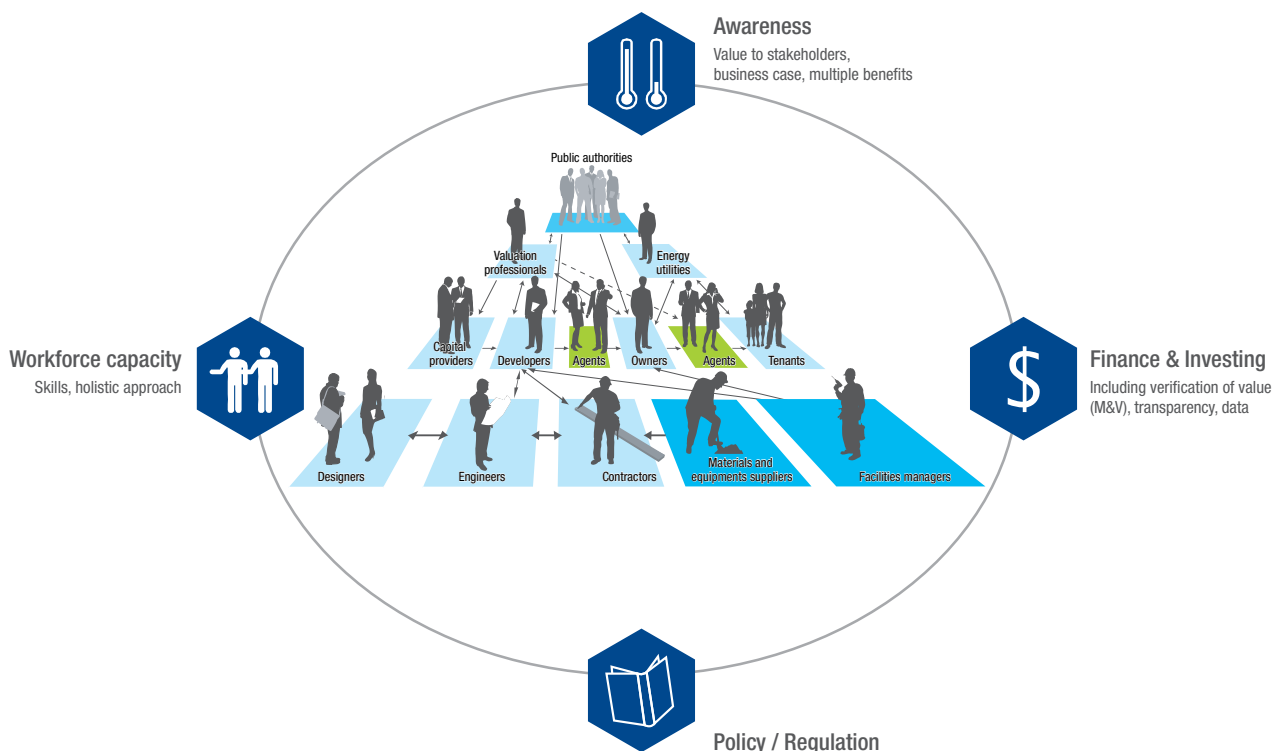
Why get involved in a market engagement

The challenge: market barriers

Technological solutions exist that use significantly less energy in building operations. However, achieving widespread uptake of efficient technology, design and best practice requires the correct market conditions.

What hampers progress is a multitude of local, non-technical market barriers amplified by the highly fragmented building value chain. The EEB 2.0 project's pilot engagements have shown that the following 4 core topics typically surface in all local building markets – though this does not preclude other issues from emerging during the preparation of a market engagement.

1. **Lack of awareness and leadership** particularly related to challenges in making the business case;
2. **Workforce capacity** and the need for proper skills and collaboration throughout the value chain to consult, plan, implement and operate the right solutions;
3. **Lack of adequate financing models** that overcome the split incentives inherent in the buildings sector and enable value sharing;
4. **Lack of consistent and long-term policy frameworks** (national, sub-national, regional and city), including regulations and incentive schemes.



The solution: engaging the buildings value chain

These market barriers combined with fragmentation of the building value chain result in a misalignment of stakeholder interests, benefits and motivations.

It shows that the market barriers are best overcome by convening all the relevant stakeholders in the building value chain at local level. This market engagement approach is a way of creating a sustained non-competitive environment by going beyond conservatism and building trust among stakeholders. It also helps to develop the necessary awareness and collaboration that will encourage decision-makers to adopt more energy-efficient building practices.

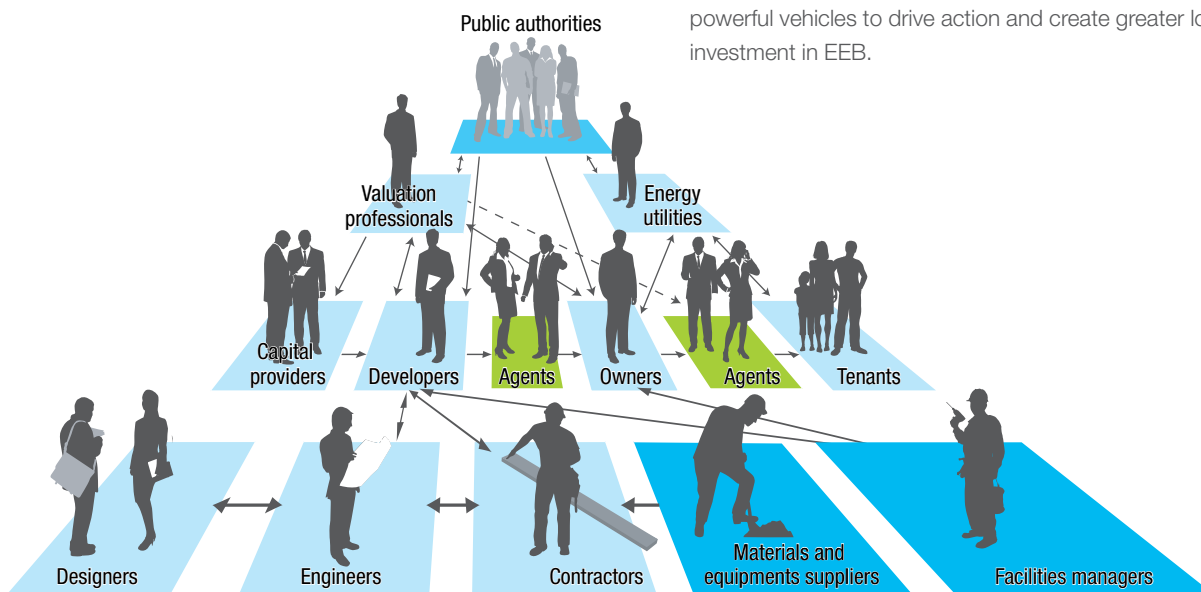
The support and commitment of local regulatory and/or legislative policy makers is an important success factor. It is indeed the collaboration between the public sector and the private sector that creates a vibrant market for energy efficiency. National and sub-national governments have an important role to play in helping the building sector achieve higher levels of energy efficiency and sustainability (e.g. adoption of energy codes; promotion of transparency on energy consumption for residential and commercial buildings; set up of incentive schemes). And business can provide insights and support to prepare and implement these policies.

The WBCSD market engagement process provides:

- An analysis of the market situation for energy efficiency in buildings
- The engagement of all relevant stakeholder groups in the market
- The identification of the key market barriers and actions to overcome these barriers
- An action plan and identification of the stakeholders who will lead the implementation of these actions
- The formation of an EEB platform to enhance sustained action-oriented public-private sector dialogue
- Access to a global stakeholder network driving local action (with best practice sharing)

The cornerstone of each market engagement that the WBCSD has piloted in 10 locations is the **Energy Efficiency in Buildings Laboratory (EEB lab)** – a three-day workshop bringing together the value chain which aims to get a clear understanding of the market situation and recommend actions around the four core topics usually addressed (Awareness and Leadership; Workforce capacity; Financing; Policy and Regulation). The actions are then implemented by the motivated stakeholders **through an EEB platform**. See Part II for details.

EEB Platforms typically represent the first-ever, cross-sector, coordinated action covering the entire value chain in their respective local markets. The Platforms themselves are therefore powerful vehicles to drive action and create greater local investment in EEB.



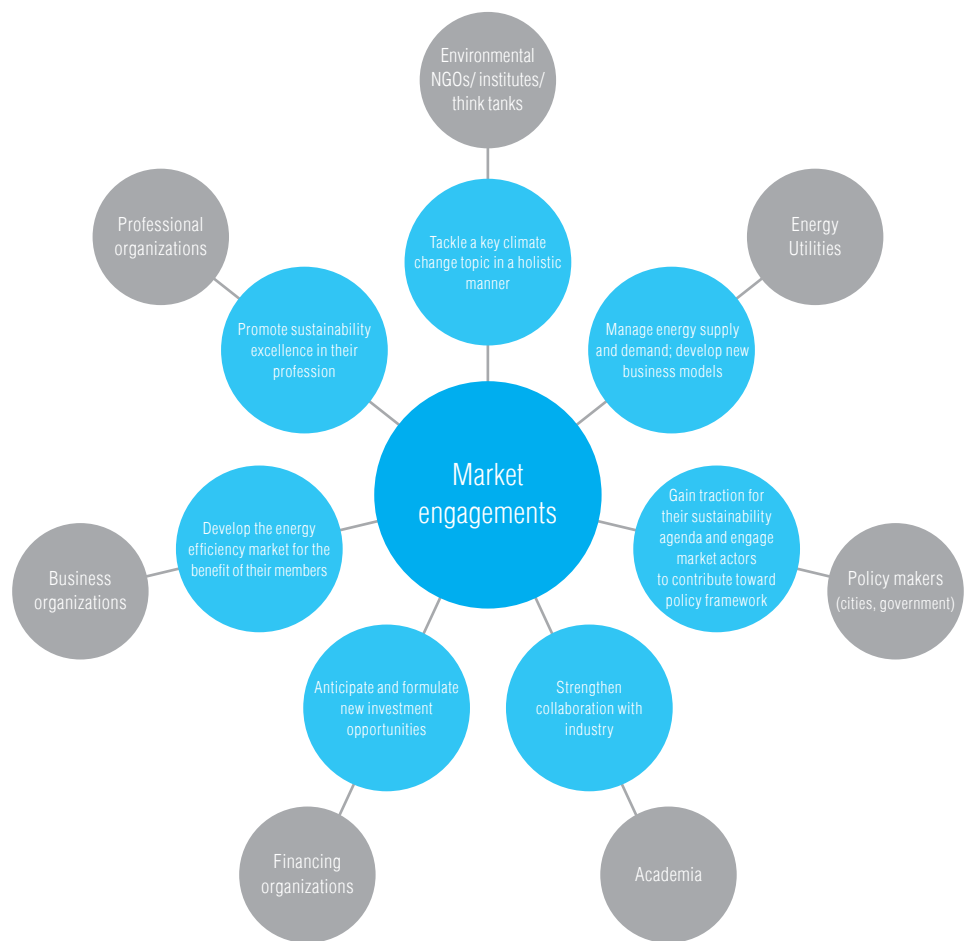
Relationships in the building value chain

Source: WBCSD (2015), adapted from *Energy Efficiency in Buildings, Business Realities and Opportunities, Facts and Trends*

Benefits of participating

The stakeholder table below summarizes why different stakeholders should get involved in a market engagement, in what capacity and what they stand to gain.

For the 10 pilots, WBCSD and its members were the conveners for the market engagements. There are however different opportunities for stakeholders to be involved in a market engagement.



Source: Extract from Energy Efficiency Market Report 2015, IEA adapted from IEA (2014a), Capturing the Multiple Benefits of Energy Efficiency, OECD/IEA, Paris




“One of the things I like about the EEB Laboratory process is the group discussion format. This allows a diverse group of people from across the building and general business sectors to talk about and share their experiences. The Building industry here is conservative, rather sluggish to innovate and very fragmented. This makes it difficult to get a holistic viewpoint. The EEB Project makes that easier. Businesses tell me they appreciate the stakeholder-convening power of the Laboratories, the ability to define local priorities, and the open and honest dialogue”

Idris Sulaiman is Project Co-ordinator of the WBCSD's Jakarta EEB Laboratory. He is an External Advisor to Green Building Council Indonesia, and Research Associate on Energy, ICT and Buildings at the Research Center for Climate Change Studies at the University of Indonesia

Why different stakeholders should get involved in EEB market engagements

Category of stakeholder <i>(options for involvement: lead or support)</i>	Why get involved?	Stakeholder benefits from the market engagement <i>(Short/ Medium/Long term)</i>
Business organizations and their members (such as WBCSD, BCSDs at local level, Green Building Councils, RE associations) <i>Lead or support</i>	Develop the energy efficiency market for the benefit of their members and help achieve corporate commitments (carbon reduction)	ST: Business networking opportunities; understand market issues and trends MT: Identify collaboration opportunities to overcome market gaps (e.g. capacity building) LT: Higher demand for energy efficiency solutions
Professional organizations (association of architects, owners, tenants, facility managers, developers, real estate, etc.) <i>Lead or support</i>	Promote sustainability excellence in their profession	ST: Enhanced market understanding; networking opportunities MT: Ensure that professionals' interests are well understood LT: Better trained professionals on sustainability issues
Policy makers (cities, government) <i>Lead or support</i>	Gain traction for their sustainability agenda and engage market actors to contribute toward policy framework	ST: Access to a network of private organizations MT: Stakeholder consultation and input on public policies LT: Enhanced support for the implementation of public policies; strategic engagement with the private sector and other stakeholders
Environmental NGOs / institutes / think tanks <i>Lead or support</i>	Tackle a key climate change topic in a holistic manner	ST: Ensure the challenges are framed in a way which is consistent with research MT: Visibility for NGO work LT: Transform the market to reduce energy consumption and emissions from buildings
Energy Utilities <i>Lead or support</i>	Manage energy supply and demand; develop new business models	ST: Satisfy their customer demand MT: Develop new business models LT: Transform the energy market
Academia <i>Support</i>	Strengthen collaboration with industry	ST: Enhanced relationships with business MT: Established trusted relationship with business LT: New research and implementation opportunities
Financing organizations <i>Support</i>	Anticipate and formulate new investment opportunities	ST: Better understanding of the issues related to energy efficient business models MT: Develop innovative financing models for EEB projects LT: Finance EEB projects



“I’ve been involved in Green Buildings for over 15 years. The WBCSD’s EEB Project first came to my attention when I was on the World Green Building Council Board. I was invited to join the project’s Assurance Group in 2014.

I thought to myself ‘here’s a unique group of large multi-nationals with a clear interest in changing things for the better.’ They’re bringing people together and driving consensus among all stakeholders, including the NGOs. I was hoping for plenty of international example-sharing and cross-pollination of initiatives and technologies that were proven and would accelerate things markedly. And I wanted to see action-oriented implementation, not just discussion.

The EEB Laboratories provide the right framework and tools, and the WBCSD has the necessary convening power and credibility to achieve this. The project’s reports can be very useful guides for others, and are easily adapted to suit different markets. The lessons learned so far are excellent for others.

For other companies that might be considering taking part, I’d say this project is an extremely good and sophisticated way to build deep as well as broad networks for the long term, without the hard commercial instinct acting as a break on open dialogue.

We know what can be done: after just 10 years more than a third of buildings in Singapore are now Green-rated. But to achieve this kind of result you have to overcome the human factors that can impede or limit progress.

Depending on the local situation, a neutral third-party may be needed to bring together the various stakeholders, to build engagement, trust and open information-sharing. This, and the ability to convene an engagement team sensitive to local input and knowledge, is the WBCSD’s role. I’m happy with what I’ve seen so far.

***Chuan Seng Lee**, is one of five members of the EEB Project Assurance Group. He is Emeritus Chairman of engineering consultancy Beca Asia, Chairman of the Singapore Building & Construction Authority’s Green Mark Advisory Committee, and Honorary Advisor and Founding President (2009-11) of the Singapore Green Building Council. In 2015 he was the inaugural recipient of the Council’s ‘Green Visionary Award’ for his contributions to green buildings and sustainability in Singapore and regionally.*

“Being involved in a market engagement is a real business opportunity. In the US, companies and partners that actively engage in this program will be first movers that share in the over US\$300bn global energy efficiency market as it expands over the next 10 years, while demonstrating visible leadership at both global and local levels to support growth and impact through energy efficiency in buildings”.

William M. Sisson

Sr. Director, Sustainability and REACH
United Technologies Research Center, UTC
Co-Chair WBCSD, EEB2.0 project

“The market engagements provide neutral platforms to share best practices and discuss policy and regulation. They are a way to get direct market feedback to align business development and R&D. They strengthen local business networks to create deal flow”.

Michael Scharpf

Sustainable Development, Head Sustainable Construction, LafargeHolcim
Co-Chair WBCSD, EEB2.0 project



Dian Grueneich, is a Senior Research Scholar at Stanford University, principal of Dian Grueneich Consulting and former Lead Commissioner for Energy efficiency at the California Public Utilities Commission

“I first learned of the WBCSD’s EEB project at a Lawrence Berkeley National Laboratory workshop on energy efficiency in commercial buildings. I’ve been involved in energy efficiency research and policy for about 40 years and, for me, there are two factors that make this project particularly appealing.

First, energy efficiency efforts have historically been driven by governments and various advocacy groups, whereas the EEB project is driven by and engages the corporate sector at a global level. It recognizes the critical role of business, using a multi-stakeholder approach. It is companies that design, produce, install and deliver energy efficient products and services. They therefore have a unique role in delivering efficiency.

Secondly, the EEB project has a very ambitious scale-up strategy. Setting the bar so high aligns well with what I believe we must do: scale-up energy efficiency massively to achieve deep decarbonization of our largest and fastest-growing economies.

It was for these reasons that I expressed an interest in getting involved, and so was honored to be invited to lead the project’s Assurance Group. The EEB Laboratory model is both exciting and well thought-out. It’s a truly international effort and has shown us that the same approach can work well in many, quite different situations.

The EEB project is very much multi-stakeholder-driven, and its workshops place a real focus on first identifying and then engaging with the real leaders in any given location.

The most successful schemes work hard to include all the relevant groups, whether they are about economic development, environment policy, or something else. It’s the hallmark of a valuable and enduring initiative.

EEB Houston Key Facts

Launched: March 2015

Number of technical partner organizations: 40

Key partners: IREM, BOMA, AEE, US BCSD, ASHRAE and Uptown Houston

Company lead: UTC and Schneider Electric

Local Management: HARC

Houston Progress

- “EEB Live” sponsored webcasts
- Estimated 100m USD project pipeline through Property Assessed Clean Energy (PACE)
- Developing Career Glide Path for building operators (and incentives for employers)
- Supporting City on benchmarking, audits, and operator training

Case Study: City of Houston, USA

The EEB Project in Houston, USA is managed by the Houston Advanced Research Center (HARC), a non-profit university consortium with a sustainable development research focus. Efforts have concentrated on creating a stakeholder network and driving the activities around the four focus areas of Policy, Building Operations, Finance and Communications. Each is managed by a dedicated local committee.

Houston is already considered a front-runner in energy efficient public buildings (see adjacent commentary from HARC’s Gavin Dillingham), and the EEB Laboratory in October 2014 successfully brought together all stakeholders involved in the city’s EEB ecosystem into a single platform. EEB Houston is therefore a valuable resource that presents great opportunities for promoting EEB in the city. Local interest continues to grow along with the number of participants.

“EEB Houston is unique in its ability to harmoniously bring together key market participants from both the private and public sector,” - Jeff Craig, Ascentergy

The EEB committee for finance is playing a lead role in working with City leadership to create a Property Assessed Clean Energy (PACE) Financing District, which will facilitate access to funding for energy efficiency improvements.

The EEB Houston website 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 EEB Houston committees).





Gavin Dillingham, PhD, Program Director, Clean Energy Policy/Senior Research Scientist, Houston Advanced Research Center

“In the course of my work as an academic and sustainability consultant to the Houston City Authorities I see a lot of energy efficiency initiatives. This one stood out. I advised Houston’s city leadership team to get involved because it looked like the WBCSD had the right backing and global scale to really make a difference. There was a clear intent to build understanding and capacity in Energy Efficient Buildings, and that was appealing.

We thought the EEB Laboratory process was complimentary to the work we first began in 2004, where Houston led by example in mandating LEED standard for city-owned buildings. Now we have one of the highest concentration of LEED buildings anywhere.

Our Houston EEB Laboratory took place in October 2014 and I don’t think anyone was sure what to expect. That’s the nature of this type of program: you’re dealing with a unique set of people and every city has its own character. But we are very happy with the outcome. It showed us who we needed to bring to the table, what the City’s real issues were and where to focus our EEB efforts. It was very helpful to have a neutral outside organization facilitate that.

It’s really important to bring together all the different sectors of the real estate market rather than work in isolated groups: in Houston we had a wide diversity of people who don’t usually talk to each other coming together, not just a few siloed groups.

I would certainly recommend others get involved in an EEB Laboratory project. They are a great, unifying forum for learning about what others are doing, to understand best practice and discover the different resources available.”

Part II

How to carry out market engagements

“The EEB lab is an effective way to kick off action on the ground with a group of motivated stakeholders. It delivers a common understanding of the challenges and a market-relevant action plan to overcome the identified barriers,”

Roland Hunziker,
 Director Sustainable Buildings and Cities,
 WBCSD

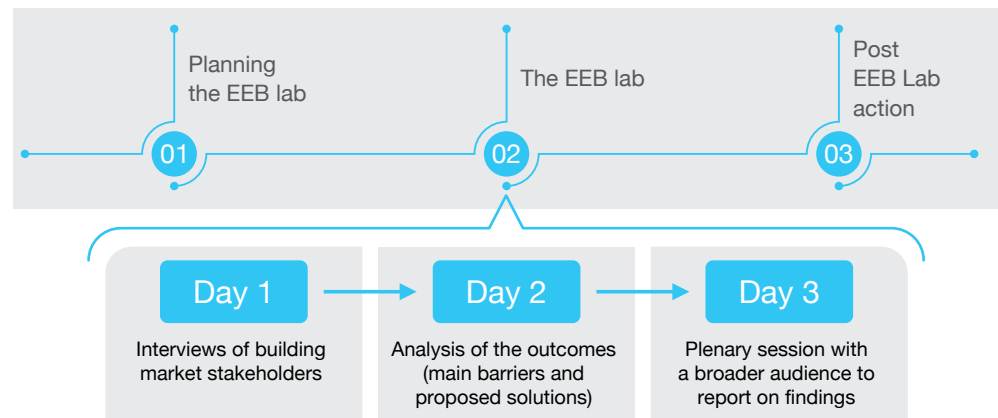
As we have seen in Part I, a broad spectrum of stakeholders stand to benefit from participating in local EEB market engagements. WBCSD has refined the methodology for undertaking these, including the detailed description of the Energy Efficiency in Buildings Laboratory (EEB Lab), which is the cornerstone of each market engagement.

The EEB Lab is a three-day workshop that brings together the key stakeholders in the building value chain, facilitates open discussion and commits them to drive action on energy efficiency in buildings.

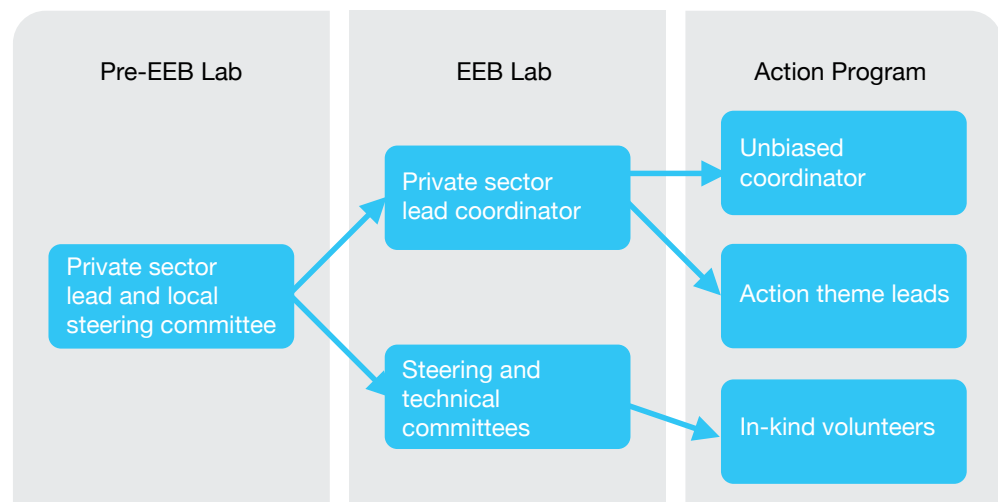
The WBCSD methodology is detailed in the following pages, with examples of good practice in terms of the process from multiple pilot projects. However, it should be noted that this is not meant to be prescriptive. We actively recommend and encourage adapting it to meet the local market context

Support resources such as templates of the various documents (invitations, promotional documents, briefing papers, etc.) are available on request (indicated by *)

Overall structure of the market engagement



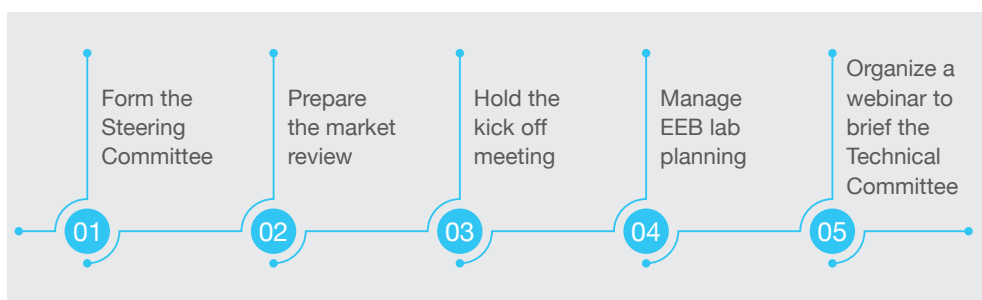
Market engagement governance



Planning the EEB Lab (duration: 6 months)

“The most valuable benefit of the WBCSD’s approach is its ability to motivate real, collaborative change on the ground. Partnering with IGBC, which is part of the Confederation of Indian Industry, gave the EEB Project instant credibility. It ensured we got attention at all the right levels: government, academia, public and private sectors.”

Jaimni Uberoi is Chairman of the Confederation of Indian Industry/Indian Green Building Council, Jaipur Chapter, and Managing Partner of J. Mohanco, a leading construction firm in Rajasthan. He is also an elected member to the CII-Rajasthan State Council.



Local demand from global companies (as in the 10 pilots) can trigger the interest to start a local market engagement. In the EEB Project, two or three WBCSD member companies showed interest to begin and one or two of them would lead the engagement, supported by local colleagues.

Once a group has decided to run a particular market engagement, the group can start the planning phase, as follows:

01 Form the Steering Committee

What The initial organizers should identify and approach potential partners to introduce the idea of the market engagement, building the case based on the elements presented in Part I (Benefits of participating in a Market Engagement). The Committee is made up of a relatively small number of organizations (3-5) and can be a mix of global and local members. It is the decision-making body and acts as the secretariat of the market engagement. Members might include business organizations and their members, cities, NGOs and academics - which all have a strong interest in acting on EEB.

Some organizations are better positioned to lead the market engagement as part of the steering committee, while others provide supporting roles (depending on commitment, resources and knowledge base). We found that identifying a group leader – someone with great enthusiasm, knowledge local connections – led to increased efficiency in our pilot EEB Labs.

Why The steering committee sets the EEB Lab agenda, coordinates work to prepare the market engagement, identifies stakeholders to involve in the Lab, drafts and sends invitations, organizes logistics, identifies Lab discussion topics and action leaders, prepares Lab materials, briefs speakers, communications, Lab reports and post-Lab action.

How The Committee has fortnightly conference calls in the run-up to the Lab and can meet locally as needed.

When The Committee is usually formed as soon as at least two or three organizations have agreed to carry out a market engagement.

02 Prepare a market review

What The market review is an analysis of the current EEB market in the chosen location.

Why The review helps to identify and confirm the scope of the market engagement, identify a host city and which type of buildings to include (e.g. commercial offices, private residential, publicly-owned, etc). The steering committee may undertake the review itself, or contract an external partner. Involving an academic partner is good practice and helps maintain neutrality in terms of information collection.

How The review is a compilation of publicly available materials (existing reports, analysis, academic papers, articles, and local information or media sources). It should include:

- 1) a description of the building stock and participants;
- 2) a market analysis based on core issues (see p6 for the four core topics usually addressed: Awareness and Leadership; Workforce capacity; Financing; Policy and Regulation).

**An outline template for the market review is available.*

When The review should be completed within two months and a draft should be shared at the first meeting, as follows.

03 Hold a kick-off meeting

What This meeting formally launches the EEB Lab market engagement.

Why Its purpose is to:

- Agree on the EEB Lab objectives
- Decide on the best format and timing of the event
- Determine the scope (geographical, buildings segments, and core topics to address from the Market Review)
- Draft a first list of stakeholders to invite to the EEB Lab (see categories of stakeholders below)

How The meeting should gather the Steering Committee and other potential partners to be involved in the planned EEB Lab - approximately 20 people. The selection criteria for Kick-off participants should include their local EEB market knowledge (both issues and stakeholders), their network, degree of influence and capacity to drive actions forward after the EEB Lab. The Market Review is typically shared at this stage ready for further analysis and comment at later stages in the EEB Lab preparation process. *See slides template

When The kick-off typically takes place three or four months before



“The kick-off meeting is crucial in confirming the interest of stakeholders to conduct a particular market engagement and align viewpoints,”

Steering Committee member



Categories of stakeholders for the EEB Lab (see details in the EEB Lab to understand their role)

<p>Technical Committee (25-30 stakeholders)</p> <p>The Technical Committee (TC) gathers experts on the core topics of the EEB Lab and stakeholders with networks across all key stakeholders groups (see next column) that can be interested in the topic</p> <p>The TC members are expected to:</p> <ul style="list-style-type: none"> • Participate in the three-day EEB Lab • Provide input to prepare the Market Review, Final Report and Action Plan • Stay engaged in the post-EEB activities to support the development and implementation of the action plan <p>Roundtable leaders and subject matter experts</p> <p>As part of the TC, roundtable leaders will be identified to lead the roundtable discussion that take place on the second day of the EEB lab (see details in the EEB lab section). They should have specific knowledge on the topics selected for the EEB Lab (usually on financing, policy, training and skills and awareness). The Steering Committee should identify one roundtable leader per topic. Other subject matter experts may be identified to participate in the roundtable discussions.</p>	<p>Interviewees (40-80 participants)</p> <p>Interviewees are invited to share their specific knowledge for hour-long discussions on the first day of the EEB Lab. They are working level or senior managers from the different categories of key stakeholders:</p> <ul style="list-style-type: none"> • Capital providers • Developers • Contractors, designers, architects, engineers • Equipment, material suppliers • Facility managers • Building owners /tenants • Policy makers • Utilities • Academics 	<p>Plenary participants (min. 100 stakeholders)</p> <p>The plenary of the EEB Lab gathers all EEB Lab participants and additional guests. It typically takes place on the third day of the EEB lab (to use the momentum of the event) but can also happen some time later (e.g. a few weeks). The purpose of the plenary is to share the findings of the EEB Lab (high level action plan) and build momentum for the follow-up activities.</p> <p>Invitees of the plenary should include the senior level representatives of EEB Lab participating organizations to secure the involvement of these stakeholders in the next stages and other organizations from key stakeholder groups, including media. Speakers should represent the highest level of organizations.</p>
	<p>Note takers</p> <p>To help capturing the information shared during the interviews, it is helpful to have one note-taker per interview group (up to six on day 1). They are usually students; they note down all they hear; it helps at the time of writing the EEB Lab report. Two note takers could also support capturing the discussion on Day 2.</p>	<p>Plenary speakers & moderator(s)</p> <p>Speakers for the plenary session should be identified and invited early. They usually are inspiring thought leaders from the public and private sector as keynote speakers.</p> <p>(see p21 Day 3 – Plenary session for the agenda example).</p>

04 Manage EEB Lab planning

The Steering Committee manages all planning and communications between the Kick-off meeting and the EEB Lab. This may include:

Stakeholder matrix and invitations – a list of approximately 250 names to invite to the EEB Lab should be created. This will include the potential Technical Committee members, interviewees and invitees for the plenary.

Two page promotional PDF and invitations - to accompany the invitation, a two-page PDF to present the Lab is typically designed immediately after the kick-off meeting. This can be communicated externally by partners (e.g. posted on websites).

* See the template and in the communications part p29

Logistics – a suitable venue should be chosen to accommodate up to 6 parallel interviews, briefing and debriefing for the Technical Committee and a plenary on the third day that can accommodate around 100 people.

Support – the Committee should discuss how best to support the EEB Lab:

Facilitator(s) - - identify who should moderate the first two days of the EEB Lab. Facilitators must: 1) Navigate the Technical Committee through the agenda of the first two days of the EEB Lab; 2) drive and manage the Committee discussions at the end of Day 1 (debriefing session) and during Day 2 (especially the morning session when the Committee has to prioritize the main market barriers). A facilitator can be a member of the Steering Committee.

Roundtable leaders - the Steering Committee also appoints members of the Technical Committee to lead core topic discussions (one roundtable leader per topic). A specific briefing should be made to the roundtable leaders (*see briefing template). Their role includes the moderation of the roundtables discussion on Day 2. They also support the review of the post-EEB Lab draft action plan, playing a key role to ensure it complies with the Lab discussion. They may also be involved in other post-EEB Lab activities. Additional subject matter experts may be identified to participate only in the roundtable discussion on day 2.

Note takers – A lot of information will be shared during the three days of the EEB Lab, especially during the interviews. The dialogue should be recorded and will help to draft the EEB Lab report/action plan. A good practice is to enlist the help of students as note-takers: one per room to note everything heard in the interviews on Day 1 and the discussions on Day 2. It is useful to have six students on day 1, two on Day 2, and one on Day 3. If the Market Review was prepared by an academic institution, this provides a ready source of students for note-taking. Anticipating the writing of the EEB Lab report - It is also good practice to agree within the small group of the Steering Committee who will be responsible for writing up the Final Report and Action Plan.

Documents to prepare ahead of the EEB Lab

As part of the preparation of the EEB Lab, the Steering Committee should prepare:

- Briefings for roundtable leaders to ensure they understand their role, including a template to guide and capture the roundtable discussions. * template
- Pre-interview guidance for interviewees to help prepare for their discussion. * template
- A detailed outline for the Technical Committee (*See template) which includes:
 - Logistics information for the EEB Lab
 - Interview timetable, including how the Committee will be divided
 - Description of the roundtable discussions
 - Mini profile of interviewees
 - Template to guide the interview conversation and taking notes

Media - the Committee should also consider if journalists might be invited to report on the EEB Lab and, if so, consider help from their communication departments or a specialist PR agency. See more in the communications section.

05 Organize a Technical Committee briefing

What A 90 minute webinar to brief the Committee members and answer any questions. *See slides template

How Managed and run by the Steering Committee, and covering: 1) details of the 3 days; 2) presentation of the market review.

When One week before the EEB Lab.

Following the webinar, the organizers should send Committee members detailed information on the EEB Lab as gathered in the Detailed Outline (see the list above in Documents to Prepare).

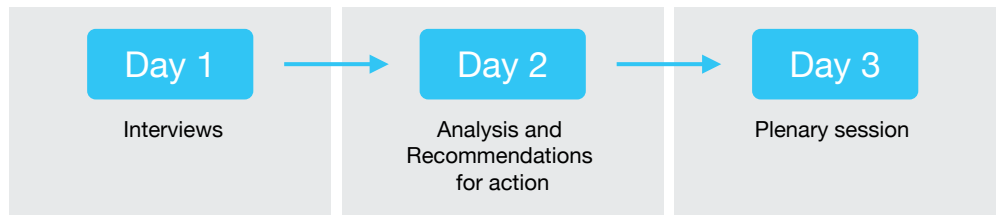
KEY SUCCESS FACTORS FOR THE EEB LAB

- Put the potential driving force organizations of the platform in the Steering Committee
- Create a high quality Technical Committee (representing the entire value chain, and the real decision makers in the local context)
- Ensure the roundtable leaders are committed to be a driving force on this specific topic
- Ensure the participation of senior executives in the plenary (typically a senior manager Technical Committee members report to)
- Source funding for a paid coordinator pre- and post-lab to increase the process efficiency and enhance the chance of market engagement success

The EEB Lab (duration: three days)

“Interviews are a very good way to learn new things from people on the ground,”

Technical Committee member



Day 1 – Interviews

What One-hour discussions with one building market stakeholder.

Why To understand market barriers from professionals on the ground.

How After a short briefing (30 min), the Technical Committee splits into small groups (3-5 people) to conduct the interviews. Typically, 6-7 interview groups will interview 6 stakeholders each.

Using four core topics: awareness; workforce capacity; financing; policy and regulation

(* See template), the interview covers:

- What works well and why in the local EEB market?
- What works less well and why, including perceived barriers
- What could accelerate actions towards EEB efficiency?

The interviews are followed by a quick debriefing at the end of the day to capture fresh feedback on what works well and what the barriers are in the market.

Group	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	
Technical Committee (TC)	<p>YC Hainan Jianwei GDF Yip Mingwei Schneider Electric Rohde & Schwarz J.L. Johnson Group Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>	<p>YC Hainan Tangwei Mingwei Zhangwei Rohde & Schwarz Schneider Electric Linn Hochschule Hochschule Dortmund Caracal WSPC</p>
10:00 - 10:30 am	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
10:30 - 11:00 am	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
11:00 - 11:30 am	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
11:30 - 12:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
12:00 - 12:30 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
12:30 - 1:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
1:00 - 1:30 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
1:30 - 2:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
2:00 - 2:30 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
2:30 - 3:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
3:00 - 3:30 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
3:30 - 4:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
4:00 - 4:30 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	
4:30 - 5:00 pm	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	Technical Committee	



Create an interview timetable to assist with planning and time keeping



Technical Committee at work, India



Technical Committee, EEB lab Rio de Janeiro

Day 2 – Analysis and Recommendations for action

What This second day is dedicated to the analysis and prioritization of the market barriers (morning) and the identification of the solutions (afternoon).

Why The interviews gathered lots of information. The Technical Committee must consider this information, together with their own market knowledge, in compiling an action plan to tackle identified market barriers.

How The day is made up of two parts:

1. Analysis and synthesis of market barriers (typically in the morning). The Committee works in groups to prioritize the top 3-5 barriers per topic (awareness, workforce capacity, financing, policy).

Examples of barriers for each topic:

Financing: lack of energy efficiency capital in the market; low awareness of EEB financial opportunities; how to articulate the business case for EEB; Incentives do not go far enough, etc.

Awareness: lack of awareness among the public/building professionals on energy efficiency in buildings; Lack of “data driven” action, etc.

Workforce capacity: Inadequate level of knowledge and skills in building supply chain; limited building operator and contractor capacity, etc.

Policy: Lack of support for long-term energy efficiency in buildings policy; Energy information and access to the data is difficult; Absence of data to make good policies, etc.

2. Identify solutions and action owners (typically in the afternoon). The Committee splits into two for two parallel roundtable discussions (2x2x75 min). The purpose here is to create recommendations for action to overcome the identified market challenges. Roundtable leaders moderate the discussion and report back to the entire group at the end of the day.

When Day 2 of the Lab

Template to capture the discussion during a roundtable discussion:

Identified barriers	Recommended solutions	Stakeholders to involve in the solutions	Is it short/medium/long term action?
1.	-	-	-
2.	-	-	-
3.	-	-	-
4.	-	-	-
5.	-	-	-

“The discussion on the barriers bring an alignment and consensus among the TC on what are the priorities to address,”

Technical Committee member

Day 3 – Plenary session

What A plenary session concludes the EEB Lab. It gathers all the participating organizations at senior management level and provides an opportunity to invite thought leaders from the public and private sector as keynote speakers (typical size: >100 participants)

Why Its purpose is to report on the findings and build buy-in and momentum for follow-up activities.

How The session is typically around three hours in length. The agenda is usually built around the keynote speakers and panel discussions on: The business case for energy efficiency; Key findings from the EEB Lab; and a Private sector call to action. The key findings on the barriers and solutions for each core-topic are also presented.

* See agenda template

When Day 3 of the Lab



Panel discussion during the Plenary - EEB lab Houston



Plenary – EEB lab Rio de Janeiro



Idris Sulaiman is

Project Co-ordinator of the WBCSD's Jakarta EEB Platform, is an External Advisor to Green Building Council Indonesia, and Research Associate on Energy, ICT and Buildings at the Research Center for Climate Change Studies at the University of Indonesia

“Indonesia’s president Joko Widodo made a clear commitment to lowering carbon emissions following the UN’s COP21 Climate Conference in Paris last year. Such intentions are important but we still need convincing, concrete activity at the business level in Indonesia to bring this about. And even though we have a rapidly growing and urbanising population, there hasn’t been any focus on energy efficiency in buildings. That’s what makes the WBCSD EEB Project so interesting and important, in my view: it is squarely addressing both needs.

I first encountered the EEB Project at a joint WBCSD/Green Building Council event. In November 2015 I was invited to be its local co-ordinator. I have specialised in public policy, research and project management roles within energy efficiency, ICT and sustainability for 20 years.

One of the things I like about the EEB Laboratory process is the group discussion format. This allows a diverse group of people from across the building and general business sectors to talk about and share their experiences. The Building industry here is conservative, rather sluggish to innovate and very fragmented. This makes it difficult to get a holistic viewpoint. The EEB Project makes that easier. Businesses tell me they appreciate the stakeholder-convening power of the Laboratories, the ability to define local priorities, and the open and honest dialogue.

Since holding our Jakarta Laboratory in July 2015 we have created Special Interest Groups for seven specific building types: commercial, tropical design, schools, universities, hotels, hospitals and data centers. We are focussing on activities that create tangible value – the altruistic motive isn’t enough on its own.

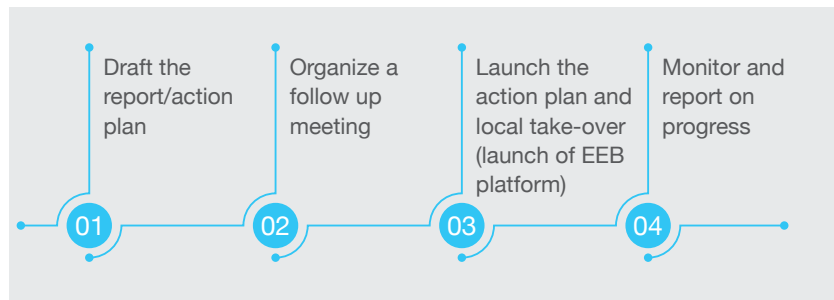
One example is our contributions to a Master List of energy efficient technologies created by the Ministry of Energy and Mineral Resources. This will become a basis for so-called ‘soft loans’ and other adoption incentives. The UK government already has an Energy Technology Product List. We borrowed the basic idea, adapted it and constructed a list of technologies specifically relevant for Indonesia. Various individuals and companies supporting the EEB Laboratory in Indonesia have contributed to this.

Indonesia is South-East Asia’s largest energy market but we don’t have national building codes for energy efficiency. Policy is therefore created at individual city level. Jakarta has set the bar fairly high in this respect, but now our third largest city, Bandung, has just announced a Green Building Standard even more stringent. It’s a clear signal of what will happen elsewhere.

We’re making good initial progress. There’s still a lot of awareness-raising to do; helping people make the business case for energy efficient buildings. But I’m optimistic. The macro-economic environment is conducive to our aims, so I’m certain we’ll soon be expanding our work to more Indonesian cities.”



Post-EEB Lab action and the EEB platform



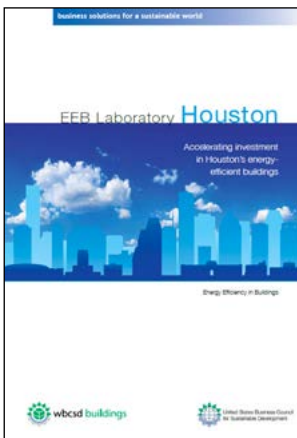
1. Awareness and leadership	Comments
1.1. Develop a vision for the program and a strategy for implementation. This includes identifying the program's goals, objectives, and key performance indicators (KPIs).	1.1.1. Develop a vision for the program and a strategy for implementation. This includes identifying the program's goals, objectives, and key performance indicators (KPIs).
1.2. Identify and engage key stakeholders, including building owners, tenants, and community groups.	1.2.1. Identify and engage key stakeholders, including building owners, tenants, and community groups.
1.3. Develop a communication plan to raise awareness and encourage participation.	1.3.1. Develop a communication plan to raise awareness and encourage participation.
1.4. Establish a steering committee to oversee the program and coordinate efforts.	1.4.1. Establish a steering committee to oversee the program and coordinate efforts.
1.5. Monitor and report on progress, and adjust the program as needed.	1.5.1. Monitor and report on progress, and adjust the program as needed.
2. Knowledge and skills	Comments
2.1. Provide training and education for building owners, tenants, and staff on energy efficiency and building performance.	2.1.1. Provide training and education for building owners, tenants, and staff on energy efficiency and building performance.
2.2. Develop and disseminate best practices and case studies to encourage adoption.	2.2.1. Develop and disseminate best practices and case studies to encourage adoption.
2.3. Establish a network of energy efficiency experts and consultants to provide technical assistance.	2.3.1. Establish a network of energy efficiency experts and consultants to provide technical assistance.
2.4. Monitor and report on the effectiveness of training and education efforts.	2.4.1. Monitor and report on the effectiveness of training and education efforts.
3. Supporting long-term policy	Comments
3.1. Advocate for policies and regulations that support energy efficiency and building performance.	3.1.1. Advocate for policies and regulations that support energy efficiency and building performance.
3.2. Develop and implement incentive programs to encourage investment in energy efficiency.	3.2.1. Develop and implement incentive programs to encourage investment in energy efficiency.
3.3. Establish a regulatory framework for energy efficiency and building performance.	3.3.1. Establish a regulatory framework for energy efficiency and building performance.
3.4. Monitor and report on the impact of policy and regulatory efforts.	3.4.1. Monitor and report on the impact of policy and regulatory efforts.

01 Draft the report/action plan

- What** The report summarizes the EEB Lab findings, with further detail included in the action plan.
- Why** During the EEB Lab, a high-level action plan is formulated that needs to be expanded with detail following the event. In particular, the action plan will look at identifying the stakeholders that will drive each action forward.
- How** The Steering Committee manages preparation of the report (one partner should be identified to lead this process). The notes from students should facilitate the writing.
- When** Speed is important to maintain momentum. A first draft should be ready approximately one month following the EEB Lab

02 Organize a follow-up meeting with the Technical Committee

- What** The Steering Committee organizes this
- Why** In order to:
- Review the content of the draft report and confirm identified actions
 - Confirm ownership for the recommended actions. It is good practice to have one working group per topic with interested parties to take the actions forward.
 - Agree on governance (i.e. setting up of a coordination EEB platform) to take the work forward
- How** The draft report should be sent to the Technical Committee before the meeting
- When** The meeting should take place around two months after the EEB Lab.



03 Launch the report/action plan and local take-over

What The action plan is finalized after the follow-up meeting. Working groups are formed on the core topics identified to take the actions forward.

Why It is a good opportunity to reconvene all EEB Lab participants. The purpose is to:

- Present the final action plan
- Present the action area leaders and mobilize further stakeholders to support
- Present the intended collaboration model (see below – EEB platform)

How The launch of the report is usually the moment when local takeover occurs. Local stakeholders then take full ownership of the action plan implementation and organize the necessary future work (i.e. the Steering Committee hands over the initiative to the local action teams).

When The report could be launched at a co-located event of another relevant conference/meeting.

04 Launch the EEB platform to take the actions forward

What Identifying how the various EEB Lab partners will coordinate their future work is vital. A (resource-light) EEB Platform can be set up for this purpose. It can be led by one organization, which is recognized by all partners, or a rotating co-chair model can be identified.

EEB Platform examples: EEB Houston is coordinated by HARC, with support from the US Business Council for Sustainable Development; EEB platform Poland is co-chaired by the Construction Marketing Group (BuroHappold and NAPE). Each working group has a leader.

Why The EEB platform coordinates the continuing work and ensures progress.

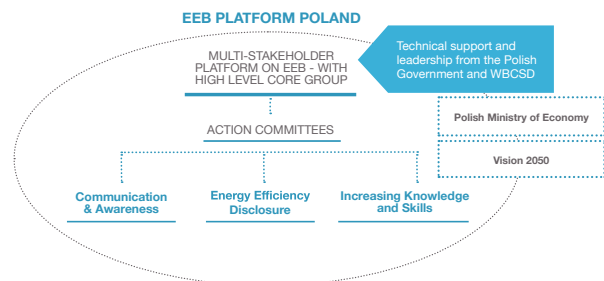
How The resources to develop the action plan need to be identified locally among the EEB Lab partners. This generally includes coordination, work in specific action areas and potential funding for publications and communication.

When The EEB platform typically receives its formal launch at the event for the launch of the report (local take-over).

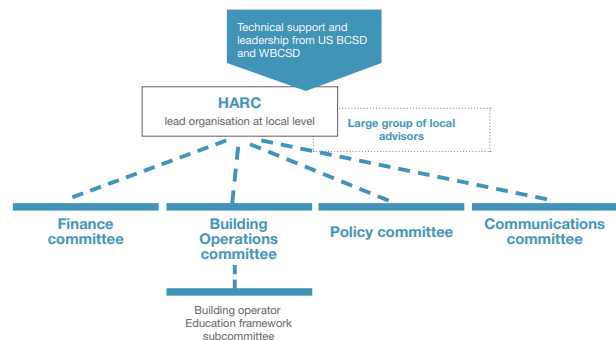


Meeting to launch the EEB lab report in Poland

EEB Platform Poland: organization



EEB Houston: organization



Note: the EEB 2.0 project funded the market engagements for 2 years (from the preparation of the EEB lab to the coordination of the EEB platform for 1 year). It was part of the mission of the local coordinator to secure funding for the EEB platform after its first year of existence (through foundation support, public contracts, corporate sponsoring etc.).



SUCCESS FACTORS

The success of an EEB Platform lies in the following factors:

- It is private-sector led with strong involvement from public sector, academia and NGOs
- It balances interests
- It focuses on actions, based on a common understanding of key market barriers
- It identifies actors that can bring about positive change
- The EEB platform is local



**Katarzyna
Chwalbińska-**

Kusek Buro Happold
Engineering, co-chair
and local coordinator
of the WBCSD's EEB
Platform Poland

"I was referred to the EEB Project by a business contact. I thought it looked very interesting; a unique chance to be involved in a project bringing international experience to solve local market challenges. I was motivated by professional curiosity, and was hoping to learn about how others had overcome EEB barriers in other markets. I also wanted to hear an objective opinion on the Polish market. I see EEB as not just a huge commercial opportunity – it's really more like a mission. Energy Efficiency has to be embedded in company strategy to 'future-proof' the business.

The most valuable thing for me was the willingness to collaborate and cooperate, not just from such a diverse group of stakeholders from different markets but also between competing companies. It really brought home to me the value of working together in this way, and how it's far better to have a bigger, co-ordinated effort than lots of separate, tiny initiatives.

The Laboratory process itself was impressive, and brought together lots of very experienced people. The WBCSD has developed a really great model for this and I'm very pleased I became involved. It was a valuable learning experience with tools and techniques I can use again. It resulted in 20 recommendations and, while they didn't identify any that could be described as new, it was hugely valuable to have them validated by a unique external group of experts.

I am now leading and coordinating the resulting EEB Platform Poland, designed to drive local action. We deliberately set ourselves achievable goals; expecting overnight change would be unrealistic. But we already have 15 organisations very engaged in working together, including the City of Warsaw and The Polish Association of Architects. An early goal was to collect energy usage data from commercial offices in Poland and so far we have this for 48 buildings, which is an unprecedented result.

Our big goal is to strengthen collaboration and cooperation with public sector stakeholders in Poland. In summary, I'd say it was an extraordinary experience; a one-off chance to sit around the table with so many others in a well-planned and structured way. We've started an EEB movement in Poland and I'm very pleased with progress so far."



05 Monitor & Report on progress

Following the action plan launch, regular calls will take place among the EEB Lab coordinators and the action area leaders. The working groups should meet with whatever regularity is considered appropriate to keep up the momentum and organize the work.

Webinars can be organized to share good practice and progress with other local action teams in the region or around the world. Regular progress reports to document how the work is advancing are also useful (e.g. six monthly progress reports).

Indicators to measure progress and impact

Three levels of indicators can guide how to measure progress and the impact of the action plans:

1. **Enhanced coordination among building market stakeholders** – the degree to which the EEB Lab has led to improved coordination and collaboration can be measured using simple tools, such as interviews and surveys.
2. **Progress on identified actions** – each action area should define a timeline and deliverables, which can be assessed in short/mid/long-term perspectives (6-12 months, 1-2 years, over 2 years) E.g. the number of building operators trained in presenting the EEB investment/business case can be assessed (EEB Houston).
3. **Impact on investment decisions in the market** (new build and retrofit projects) – this is the most difficult progress indicator to capture but also the most important one.

Examples include using surveys before and after awareness campaigns to track changes in target audience understanding. Feedback surveys can also be used for users of specific tools or guidance documents developed.





Case Study: How the Warsaw EEB Laboratory facilitated public-private sector engagement

The EEB Laboratory in Warsaw in June 2014 brought together many private sector companies. Despite some competing interests, it proved to be a catalyst for driving cooperation, not just with each other but also with the Lab's public sector participants. The EEB Platform Poland was created as a result. Its aim is to coordinate national work on EEB by raising awareness of which organizations are doing what, and sharing good practice. The platform also established strong relationships and long-term cooperation with the public sector. The platform plays an important role in avoiding the duplication of work, which was previously a local issue, and encouraging EEB action by promoting cooperation and engagement among EEB stakeholders.

A particular outcome from this collaboration was the publication of a Health & Productivity White Paper (Q3 2015). The paper was produced to improve awareness of EEB's multiple benefits in the Warsaw region, and to promote the consideration of secondary benefits when evaluating the full costs and returns.

The group now works in cooperation with the public sector to drive a long-term national multi-stakeholder campaign on EEB benefits: to communicate what the EEB Platform is doing, raise awareness, recruit more members, and achieve long-term policy change objectives. Other specific actions from the EEB Lab include the creation of a national energy benchmarking system for buildings and the development of training materials to be used to guide the commissioning, design and construction of EEB projects in Poland

EEB Poland Key Facts

Launched: December 2014

Number of partner organizations on the steering committee: 15

Key partners: BuroHappold, NAPE, City of Warsaw

Company lead: Skanska

Local Management: Katarzyna Chwalbińska-Kusek, BuroHappold Engineering

Poland Progress

- Residential EE financing facility of 200m Euros launched by EBRD
- Launch of benchmarking report on "Operation cost in commercial building", November 2016
- Platform for public-private dialogue and action



Jaimni Uberoi is Chairman of the Confederation of Indian Industry/Indian Green Building Council, Jaipur Chapter, and Managing Partner of J. Mohanco, a leading construction firm in Rajasthan. He is also an elected member to the CII-Rajasthan State Council.

“I first became aware of the WBCSD’s EEB Project through my long-standing involvement with CII-IGBC, the Indian Green Building Council. I saw this as an opportunity to make a real difference at the local level so was happy to participate in India’s first EEB Laboratory in the city of Jaipur.

With any new initiative, there is uncertainty about how it will turn out. But we had a tremendous response, with around 70 people representing the entire local building and construction sector. In October 2016, I presented the EEB Laboratory, the outcomes and the resulting Action Committee plans at a national IGBC event. As a result, four other city Chairmen immediately expressed interest in running similar EEB Laboratories. So we’re now planning these for Mumbai, Bangalore, Kochi and Gujarat.

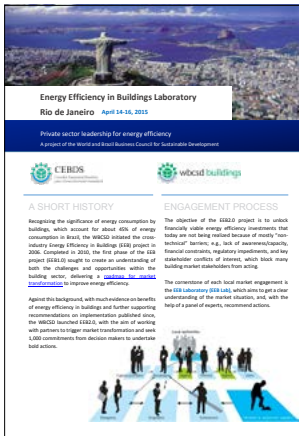
The most valuable benefit of the WBCSD’s approach is its ability to motivate real, collaborative change on the ground. Partnering with IGBC, which is part of the Confederation of Indian Industry, gave the EEB Project instant credibility. It ensured we got attention at all the right levels: government, academia, public and private sectors.

More and more people in positions of influence here know we cannot continue building inefficiently when it comes to energy use. We’re a fast-growing and modernizing economy with a corresponding rise in energy demand. So building and retro-fitting with maximum energy efficiency in mind is gaining recognition as fundamental to the future.

I feel like we’ve already made a great contribution to ensure this happens with the EEB Lab, the resulting Jaipur Energy Efficiency Network and its continuing work. We are about to launch a Government-driven EEB awareness programme in Jaipur. I am telling anyone who will listen to join us, learn from us and replicate what we’ve done.”

Communication throughout the market engagement

Various tools have been developed to communicate on the EEB market engagement:



Prior to the Lab

- **A two-page PDF brochure on the EEB Lab** – describes the main details of the Lab (context, objective, date, venue, and partners) – it accompanies the EEB Lab invitation and is available online beforehand.*
- **Web news** announcing the EEB Lab should be posted on Steering Committee member websites
- **Media involvement at the EEB Lab** - This is a planning question the Committee should consider. It may be more advantageous to invite the media to the launch of the report, once messages from the EEB platform are clearer and stronger. Support from a public relations agency may be considered to engage with relevant local media at the optimum times.



Energy Efficiency "makes business sense", Houston Chronicle



Classy old buildings strive for modern energy efficiencies, Houston Chronicle

“We hired a PR agency to manage contact with local media. We engaged with the agency early in the process so that they understood what the lab was all about. This resulted in 2 articles in one of the local newspapers,”

Steering Committee member, EEB lab Houston

During the EEB Lab

- **A short video** (less than three minutes) can be produced during the EEB Lab with interviews of roundtable leaders – it can be posted online and shown during the launch of the report. A video helps to visualize the events and get traction from stakeholders who did not attend the EEB Lab but are still interested to join the initiative.
- **Web news** – on Day 3 of the Lab, or shortly after the Lab, a news item should be posted online with the main outcomes and a list of participants. It may be a press release if the SC has decided on a media strategy.

After the EEB Lab

- **The EEB Lab report** - Consists of a summary of the Lab and includes the final action plan, which details the action areas and how the action will be coordinated in the future.
- **Web news on partner websites** (such as announcing the launch of the EEB Platform)
- **Progress report Snapshots** - are created and regularly updated to document how the work is advancing (e.g. bi-annually). The progress reports are posted online.



[Example of the video of the Netherlands & Belgium EEB lab produced for the plenary session](#)



[Video of the EEB labs in Kuala Lumpur, Jakarta and Singapore](#)

“We managed to produce the video overnight and it was shown as an introduction to the closing plenary the next day”.

Rinske van Heiningen,
AkzoNobel,
coordinator EEB lab
in the Netherlands/
Belgium

Part III

Learning from the 10 EEB pilot engagements

As part of its scale-up planning, the EEB Project analyzed the success and learnings from the methodology used in its 10 pilot engagements.

Critical success factors

- Visible private sector leadership and involvement
- A lead company operating under the umbrella of WBCSD
- Developing trust and a common vision among stakeholder groups
- Selection of a trusted local coordinator before/ during the Lab
- Favorable economic market conditions and political stability
- Central coordination with EEB Platforms for best practice sharing
- Involvement of city leadership enhances relevance

Key learnings

- **Involve organizations with well-established local networks** As the market engagement needs to have the building value chain fully represented, it is essential to secure the participation of well-connected organizations - particularly in the Steering Committee.
- **Leverage existing local building energy efficiency market initiatives** The engagement should build on and support existing local initiatives to strengthen its relevance in the market, particularly initiatives undertaken by the public sector.
- **Align public and private sector interests to motivate public officials & ensure early commitment from public authorities** As a consequence of leveraging existing local building energy efficiency initiatives, public and private interests should be aligned, which will help to motivate public officials to participate (actively) in the EEB engagement.
- **Eliminate knowledge biases with neutral market research** Commission an academic partner to carry out the market study to maintain neutrality in the information used. It is important to establish high quality input (market review) and interview-generated content to inform the Technical Committee and eliminate knowledge biases.
- **Engage a diverse Steering/Technical Committee** The Steering/Technical Committee needs to represent the entire buildings value chain with a good mix of public and private stakeholders. Representation of the entire value chain promotes a holistic understanding of the market barriers and their potential solutions.
- **Commit respected local unbiased agents as coordinators** Identifying and resourcing the optimal local coordinator to drive the action plan following the EEB Lab is crucial. The person/ organization needs to be credible, neutral and locally respected to mobilize the various building market stakeholders to implement the action plan.
- **Make EEB Platform action commitments public** It is important to develop and communicate public commitments, and potentially involve media. Presenting the results of the EEB Lab in open plenary is a good way to communicate public commitments for action.
- **Provide opportunities for community leadership** Providing opportunities for individuals and organizations to be visible (e.g. through media stories, local dialog, etc.) and help enhance their image as leaders in the local community can benefit the local EEB movement in general.
- **10-40% of EEB Lab participants claim their involvement created business opportunities** Stakeholder participation in the market engagement should create in as many business opportunities as possible (e.g. in the form of news contacts, improved knowledge of the market resulting in product innovation, etc.).

The establishment of a dedicated, local organizational driver is critical. Early commitment from regulatory authorities is also critical

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