LCTPi
Led by wbcsd

Low Carbon Technology Partnerships initiative

Action plan

Energy Efficiency in Buildings

The building sector represents one third of final energy use worldwide

Background

Energy-efficient buildings are key to limit global warming

Buildings have a major role to play in addressing climate change. The building sector represents one third of final energy use worldwide and over 20% of global man-made Greenhouse Gas (GHG) emissions.

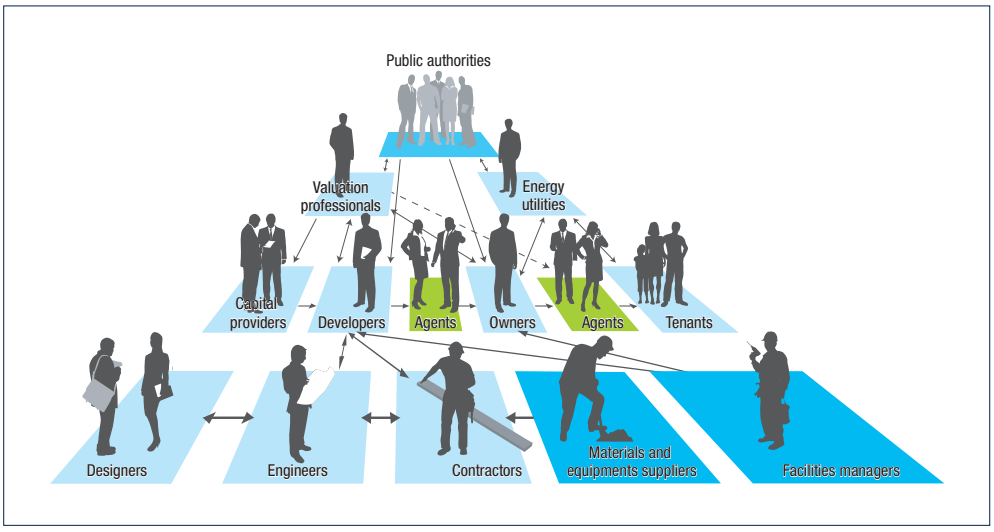
Reducing energy consumption in buildings through increased energy efficiency will provide a significant contribution to ensuring the rise in global temperatures is limited to under 2°C.

Increasing the energy efficiency of buildings also delivers additional economic and social benefits such as creating jobs, improving health and productivity, improving utility capacity management, and reducing pressure on public budgets.

Overcoming market barriers

There are existing financially beneficial building practices and technology solutions for design, construction and operation that use less energy to heat, cool, ventilate, light and control buildings in conjunction with using better performing envelope designs and materials. Delivering energy-efficient buildings means adopting these practices and tools as well as changing user behavior.

However, there are non-technical barriers that hamper the uptake of energy-efficient building solutions in both new and existing buildings. These barriers lie in the complex relationships and interactions between market participants. Solutions have to be found by engaging the full range of stakeholders across the building value chain, in local markets. Only increased coordination and collaboration in local building markets can lead to improved market acceptance of energy-efficient building practices.



Relationships in the building value chain

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

Local action plans derived from multi-stakeholder engagements

WBCSD, through its Energy Efficiency in Buildings (EEB 2.0) project and in partnership with the International Energy Agency (IEA), the Urban Land Institute (ULI) and the World Green Building Council (WGBC), carried out private sector-led local multi-stakeholder engagements ("EEB Laboratories") in 10 different markets[1)] to develop action plans that address the key barriers for energy efficiency in buildings in each respective market.

Experience from these local multi-stakeholder engagements has shown that the following 4 core topics typically surface in all local building markets (Action Framework):

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 along the value chain to implement the right solutions;
3. **Lack of adequate financing models;**
4. **Lack of consistent and long-term policy frameworks** (national and sub-national), including regulations and incentive schemes.

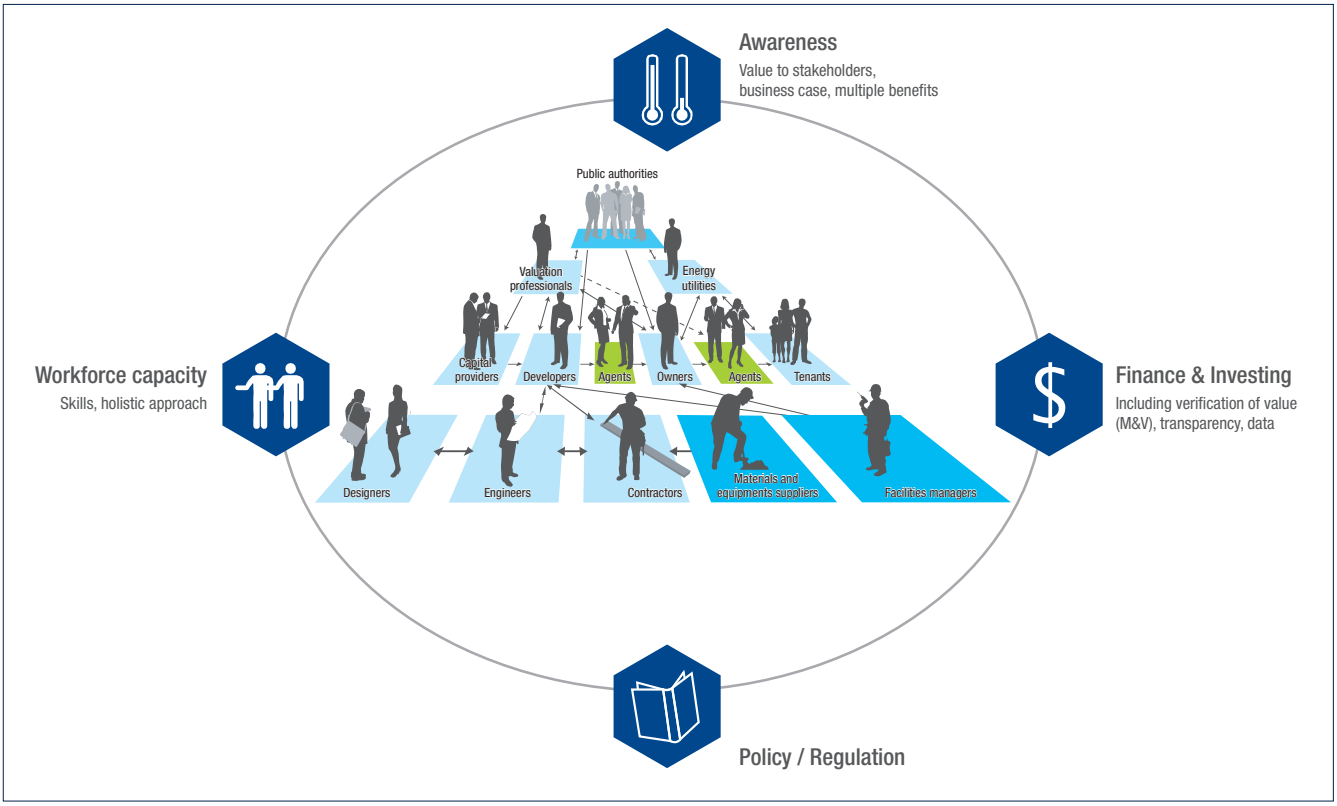
As a result of these EEB Laboratories, WBCSD and its member companies are leading the development of market-specific action plans in 10 local markets around the globe.

Action Teams have been formed to implement identified solutions, and a network of involved stakeholders is set up to coordinate work and track progress (see for instance the progress reports for Houston and Poland on www.wbcsd.org/buildings.aspx).

The key to success of these engagements lies in:

- Private sector leadership with strong involvement from public sector, academia and NGOs
- Action focus based on a common understanding of market barriers
- Identification of champions for change and strengthening of their networks
- Connection with national and sub-national priorities such as enhanced energy security, employment, health and capacity building

Following this demonstration in selected markets around the world, the EEB 2.0 member companies have launched the Low Carbon Technology Partnership initiative for Energy Efficiency in Buildings (LCTPi- EEB) in order to scale up local market engagements around the world, led by the private sector.



[1)] Houston/US; Warsaw/Poland; Bangalore & Jaipur/India; Rio de Janeiro/Brazil; The Netherlands and Belgium; Kuala Lumpur/Malaysia; Jakarta/Indonesia; Singapore; Shanghai/China

Ambition

Using today's best practices and technologies projected energy use in buildings in 2030 can be reduced by 50% through actions on energy efficiency that offer favorable economic returns.

This corresponds to a ca. 15-20% reduction in total global energy consumption, which is in line with the needed reductions contribution from the building sector to achieve a below 2°C target by 2050.

What needs to be done to reach the ambition?

Through a globally concerted partner effort this ambition is achievable. It is recognized that action on energy efficiency in buildings needs to take place at local level. To achieve this goal will require a rapid scale up of local action plans aimed at removing the market barriers for investment into energy-efficient buildings across the globe as well as enhanced dissemination of good practice across markets and building value chain stakeholders.

On the pathway to reach this ambition, LCTPi-EEB members agree to a series of actions that need to be reinforced by the work with local and global partners to reach this ambition collectively.

1. LCTPi EEB member companies' actions

The LCTPi-EEB members agree to:

Continue driving the demonstration project led by the private sector, in order to continue showing that locally led efforts can catalyze market-wide energy efficiency investment in new build and in the renovation of existing building stocks.

As initiators of the EEB 2.0 project, the companies will stay engaged in the markets where EEB Laboratories have taken place in order to ensure action plans to address market barriers are implemented and report on progress and results.

The action plans of the 10 market engagements carried out between 2013 and 2015 will be published by the end of 2016; implementation will be ongoing and progress will be reported. Action plans and progress report will be available on the WBCSD EEB webpages.

The companies will ensure the set-up of dedicated local Action Teams facilitating change and transformation in their local markets with baseline and measurement against established KPIs. Dedicated local resources will be in charge of the coordination of the Action Teams and will report regularly to WBCSD leads for the region. These resources should be in place for 2016, with WBCSD EEB 2.0 support committed until end-2016. The local resources will identify and secure financing sources to move the project beyond 2016.

Transfer EEB 2.0 project knowledge and best practices to regional and global LCTPi partners that share ambitions to take a local engagement approach forward at scale.

The LCTPi EEB members will look at replicating the EEB Laboratory methodology with partners. They will develop the material necessary for partners to replicate the market engagements (including guidelines on Why & How of engaging market stakeholders describing the main steps of the EEB market engagements with examples of good practice from the 10 pilots).

Position their companies for continued participation in market engagements to transform local building markets.

In addition to the 10 pilots developed by the EEB 2.0 project, LCTPi-EEB members will work to engage local colleagues in the additional market engagements that partners will carry out.

To continue to evaluate their own operations and invest to improve energy efficiency performance, in alignment with stated programs and emission reduction goals.
The LCTPi-EEB members will continue advocating how companies can themselves reduce energy use in buildings.

Throughout 2016, LCTPi-EEB members will continue reporting on their progress in their sustainability report, and/or share case studies for promotion.

In particular, LCTPi-EEB members will support the promotion of the WBCSD EEB Manifesto and the Energy Efficiency Toolkit for Buildings, launched in December 2015, and further feed the toolkit with case studies.

To support public policy in national and sub-national contexts that facilitates breaking down identified structural barriers.
National and sub-national governments have an important role to play in helping the building sector achieve higher levels of energy efficiency and sustainability. By developing action plans jointly with the private sector they also gain necessary insights and support on how the building sector can contribute significantly to their intended nationally determined contributions to climate change mitigation (INDCs).

Through 2016 and beyond, the LCTPi-EEB members will identify opportunities to advocate for long-term policy frameworks on energy efficiency in buildings.

LCTPi-EEB members will ensure that action on Policy and Regulation will be included in the core topics addressed by local partners committing to set up and implement local action plans.

Examples of measures that can be pushed by national and sub-national authorities:

- Help create an energy-aware culture among building professionals and citizens, in particular end-users
- Promote transparency on energy consumption for residential and commercial buildings (through e.g. energy audits, benchmarking, labelling)
- Establish national/local strategies that provide a clear policy framework on how to achieve an energy-efficient building stock. This includes the adoption, strengthening and enforcement of building energy codes
- Set up and maintain incentive schemes linked to actual energy performance and improvements

2. Scaling up with partners

A 50% reduction of projected energy use by 2030 is possible to achieve based on today's known building practices and available technologies. To get there, however, will need an internationally concerted partner effort to drive and scale up locally defined action plans that address the key market barriers for energy efficiency in buildings.

To initiate this global effort, the LCTPi-EEB aims to achieve the following in 2016:

- Initiate new local stakeholder engagements that lead to implementable action plans with support and leadership from LCTPi partners
- Identify a scale-up mechanism, including funding sources, to reach 50-100 local stakeholder engagements by 2020
- Get the EEB Action Framework recognized internationally for driving action at local level and develop indicators to measure progress
- Work with partners to set up a global mechanism for coordination and sharing of good practice under the Global Alliance for Buildings and Construction
- Develop clear recommendations (for business and policy makers) to support investments in energy efficiency in buildings at scale
- Report on progress at a future Buildings Day, possibly at COP22 in 2016

Partners can support the LCTPi-EEB by providing their knowledge and convening power to replicate and scale local building market engagements aimed at creating the market conditions for improved energy efficiency in buildings. Partners can choose different models of engagement:

Convener of local stakeholder dialogues

Business organizations, city networks, NGOs and international organizations can be conveners of local stakeholder dialogues, leveraging also other partner efforts such as the Sustainable Energy for All (SE4All) Building Efficiency Accelerator.

A separate document available on the WBCSD EEB webpages explains the value proposition and role different partner organizations can take.

Knowledge partner

Through the LCTPi-EEB, partners will be able to share their work on the core topics to support local markets and facilitate local activities and hence contribute to reach the shared ambition. This can include training material, toolkits, and approaches for standardization, among others.

The LCTPi-EEB will support the setting up of a global coordination platform through which partners can share their expertise and report outcomes of local market engagements to enhance the global knowledge pool. Such a coordination mechanism should be demand-driven (i.e. driven by the relevance for local market stakeholders) and set up under the Global Alliance for Buildings and Construction being launched during COP21 in Paris in December 2015.

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