Building Performance Hubs Accelerating the High-Performance Transition

The purpose of this document is to provide an overview of the value of a Building Performance Hub, and guidance on how to develop one.
introduction

State and local governments are rapidly adopting next-generation climate policies to reduce carbon emissions and make buildings safer, healthier, and more affordable to operate. To 1) inclusively engage and aid their communities in achieving policy objectives and 2) rapidly scale the market demand for high-performance buildings, jurisdictions should consider developing a high-performance building hub (Hub) that can engage and support key audiences.

Modeled on successful Hubs created and managed by Building Energy Exchange (BE-Ex) and Institute for Market Transformation (IMT), in New York City and Washington, DC, respectively, a Hub delivers customizable best-practice and educational resources that support stakeholder policy compliance and provide cutting-edge business tools that help build thriving and inclusive local clean energy markets.

A Hub is typically created and managed by a local nonprofit in collaboration with and support from the local jurisdiction and from private-sector partners, but every Hub should benefit from lessons learned elsewhere. While created and operated locally, a Hub can participate in a first-of-its-kind national network that makes bold building performance policy possible by transferring critical knowledge, programming, and experience in communities across the country, sharing and leveraging resources amongst a growing network of Hubs in New York, Washington DC, St. Louis, Kansas City, Chicago, and Denver.
Hubs have provided local building performance policy implementation solutions in New York and DC by creating high-performance building best practice centers that provide communities with the tools they need for ambitious public climate goals and building-specific policy objectives. In New York City, the Building Energy Exchange is a decade-old center of excellence for high-performance buildings that works closely with the New York city and state governments, real estate industry, and other partners to support both policy-driven and market-driven improvements to building energy and climate performance. In Washington, DC, IMT launched the Building Innovation Hub, a solutions and collaboration center for high-performance buildings supported by the District of Columbia government.

Both Hubs are critical strategic partners to their respective local governments in achieving long-term climate progress. Furthermore, these Hubs provide the foundation for a network of similar Hubs to support the effective and inclusive implementation of bold climate policy in cities, states, and regions throughout the country.
the value of high-performance building hubs

Buildings are at the center of the world’s most urgent societal and community issues, including climate change, affordability, resiliency, and public health. Over the past decade, U.S. state and local governments have adopted revolutionary policies to dramatically improve building performance based on measured energy and emissions to mitigate public and environmental impacts. However, implementing this kind of bold policy is challenging.

the challenge

Even with an ideal building performance policy design, many stakeholders will have concerns about the policy or will remain unaware of its existence until the first deadlines approach. The latter is particularly problematic since building improvements often require advance planning in order to be cost-effective.

In particular, the complex and fragmented decision-making structures in the real estate industry present significant barriers to progress. These structures include different parties who must reach consensus to achieve efficient building operations: property owners, investors, financiers, architects, engineers, construction companies and workforce, equipment manufacturers, and the hundreds of millions of residents and businesses that occupy and rely on buildings. Bringing together these stakeholders is difficult, and best practices around building efficiency are not often transferred between diverse market segments and fields.

Building performance policy success also hinges on upskilling the local construction workforce to be able to successfully deliver and implement current best practices and efficiency solutions.
the opportunity

Cities and regions can overcome these challenges by creating local Hubs that rally businesses and residents in support of public policy goals and rapidly scale competitive markets for high-performing buildings. These Hubs can also promote equitable outcomes by partnering with community organizations on program direction, particularly related to support for workforce development and the protection of affordable housing. Most importantly, Hubs can act as a neutral, trusted entity that can facilitate relationships and collaboration between the disparate parties involved in commercial real estate, the local government, utilities, and residents and community groups.

a hub will:

- Support and de-risk the adoption of bold climate policy through effective and inclusive policy implementation strategies
- Drive equitable building performance improvements by focusing support on under-resourced buildings
- Create a platform for early adopters to share best practices and lessons learned with those new to this work
- Facilitate a market shift toward high-performance buildings as a new normal business practice

the outcomes of a hub include:

- Effectively implemented building performance policies that achieve high compliance rates, modeled energy and carbon savings, and performance improvements
- Collaboration among business, government, and community leaders in achieving collective climate goals
- A thriving high-performance building marketplace comprised of a skilled local workforce that is developed around principles of economic inclusion
hub development guidance

BE-Ex and IMT offer this framework for Hub development based on experiences deploying and scaling Hubs in a variety of U.S. markets. The process elements and assets listed below have been important to the success of all local Hubs launched to date, though there has been some variation in process and resource delivery specific to each local context.

1. Hub needs assessment, business and operations plan development, and customization

A key first step is an initial assessment to determine stakeholder needs and what value a Hub may offer. The assessment should include the local policy landscape, state of the market, major stakeholders, partner organization capabilities, building stock characterization, and local goals (if some elements are already completed by an organization or jurisdiction, they can be integrated into this step). This planning enables the Hub to define, target, and prioritize the Hub’s offerings in order to deliver and co-create with partners impactful outcomes, resources, and programs for the jurisdiction, its community members, and its stakeholders while also resulting in a business or strategic plan.

The needs assessment should consider:

- Local/regional needs related to high-performance building support and existing resources assessment
- Local analysis of building stock to identify which building types should be prioritized for high-performance building support
- Funding framework plan
- Policy planning framework, where relevant
- Strategic plan to include target audience, services, resources, partnerships, and metrics to reach climate goals
- Under-resourced and disadvantaged community buildings plan and social equity index

2. Centralized training and resources backbone

After completion of a needs assessment and business or strategic plan, the next step is to launch with a targeted suite of resources, programs, and events.

Some sample resources include:

- Guidance on financing building retrofits
- Case studies, stakeholder specific guidance documents, technology explainers
- Technical courses, workshops, and panel discussions
- Networking and thought-leadership forums
- e-Learning programs and platform

3. Measure progress, analyze feedback, and revise strategy

Hub leadership should continually evaluate efforts to reach intended audiences, build credibility and achieve the goals identified in the original needs assessment and business plan.

Example evaluation and strategy work may include:

- Analyzing quarterly or annual data on audience growth and engagement (digital and in person, quantitative and qualitative) to improve effectiveness and reach
- Providing the relevant jurisdiction with periodic recommendations on how to adjust regulatory approaches and programmatic priorities

4. Network and learn from other Hubs

Becoming a part of a Hub network provides collaboration among local Hubs for content creation, federal and state government engagement, or programmatic services. Network participation can also facilitate the development of targeted bulk service procurement, tool lending services, and training libraries.
support from the building performance partnership

Leveraging their extensive experience, BE-Ex and IMT have created the Building Performance Partnership (BPP) to aid in and accelerate the development of local Hubs. Through the BPP, BE-Ex and IMT are equipped and ready to serve jurisdictions wanting to consult our services at any stage in the Hub development and deployment process above.

By engaging the Building Performance Partnership, local organizations can benefit from best practices in policy implementation and market engagement that have been tested and proven in other U.S. markets, enabling them to conserve limited resources without sacrificing programmatic excellence.

BE-Ex and IMT also lead a network of Hubs in jurisdictions that already have and are in the process of developing high-performance buildings to share experiences and learn from each other. For more information on creating a Hub or our high-performance building hub network, contact: bpp@be-exchange.org.

resource partners

Building Energy Exchange
An independent, non-profit organization initiated by Mayor Bloomberg in 2009, with significant ties to city and state agencies, the Building Energy Exchange (BE-Ex) has created a physical resource center in Manhattan where they deliver technical education and symposia, host interactive exhibits and provide access to detailed energy efficiency resources for building industry professionals and decision makers. BE-Ex has established itself as a trusted expert and advisor to the real estate and design communities, hosting over 40,000 building decision-makers at more than 1,500 educational programs, while creating a significant body of effective and actionable resources.

Recognizing its impact and leadership, BE-Ex was named as the founding hub of the International Centers of Excellence for High Performance Buildings network, created by the United Nations to support the development of high-performance buildings around the world and ensure communities meet the goals of the Paris Climate Accord. BE-Ex also received the prestigious 2023 Champion of Architecture Medal, from the American Institute of Architects, New York City Chapter.

Institute for Market Transformation
For more than 25 years, the Institute for Market Transformation (IMT) has partnered with government, business, and philanthropy to improve the spaces where we live, work, and play. IMT focuses on innovative and pragmatic solutions that fuel greater investment in high performing, energy-efficient buildings. IMT offers hands-on technical assistance and market research, alongside expertise in policy and program development and deployment and promotion of best practices and knowledge exchange. Our innovations have helped reduce carbon emissions and energy costs across billions of square feet of real estate in major U.S. cities; empowered landlords and tenants to overcome barriers to mutually-beneficial building improvements; and increased overall demand for better buildings.