

Cooperative
Works

Cooperative Works

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A Letter from the Executive Director

While the COVID-19 pandemic has affected every neighborhood in New York, communities of color have been hardest hit by the health and economic impacts of the pandemic. These racial disparities highlight structural inequalities in the city's health system, economy, and built environment. As the city plans its recovery, building wealth in marginalized communities is critical to ensuring a healthier and more just future for our city.

We applaud the City of New York and the Office of the Deputy Mayor for Strategic Policy Initiatives J. Phillip Thompson for investing resources addressing the dual challenges of an equitable economic recovery and climate change. These recommendations aim to advance the work the City has begun through initiatives like Employee Ownership NYC and the OneNYC plan to support equitable economic development and lead on climate action.

The Urban Design Forum believes that designers have a responsibility to serve our City's communities of color. To this end, our annual Forefront Fellowship gathers 25 emerging leaders to study critical issues facing the city. This year, we assembled a diverse cohort of architects, planners, policymakers, and advocates to research strategies for equitable business development in the energy efficiency retrofit market. This cohort worked in partnership with the Office of the Deputy Mayor for Strategic Policy Initiatives, who generously contributed their time and expertise, to draft these recommendations.

We commend the City of New York and the Office of the Deputy Mayor for Strategic Policy Initiatives for undertaking this timely and important project and thank them for their partnership. We owe special thanks to our Forefront Fellows for their critical thinking and commitment to equity as they worked to improve the built environment and economic opportunities in neighborhoods across the five boroughs.

We hope that these proposals will be a valuable resource to City and State officials, leaders in business development, architects, designers, developers, and community leaders as they work to advance an equitable economic recovery and build a more resilient city in the coming years.

Daniel McPhee
Executive Director
Urban Design Forum

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Introduction

As New York City recovers from the economic impact of the COVID-19 pandemic, it also faces an urgent mandate for serious and sustained climate action. In this unprecedented moment, the City should pursue innovative strategies and new partnerships to build a more equitable economy while also tackling climate change.

Buildings contribute nearly 70% of New York City’s greenhouse gas emissions. To reach the City’s climate goals, the 2019 Climate Mobilization Act (CMA) aims to cut emissions among the largest buildings by 80% by 2050. Local Law 97 — the centerpiece of the CMA — sets a series of target dates for gradually reducing emissions in the coming decades, laying the groundwork for a decisive transformation of the built environment.



In order for Local Law 97 to achieve its intended impact, many of the 50,000 residential and commercial buildings it covers across the city will need to undergo energy efficiency retrofits to reduce their carbon footprint.¹ This new demand is expected to spur an enormous expansion of the retrofit market, growing to an estimated \$20+ billion value by 2030.²

Through coordinated efforts, the City has an opportunity to address New York’s largest source of greenhouse gas emissions while also cultivating economic opportunity for minority- and women-owned businesses, employee owned businesses, and workers of color.

Too few New Yorkers generate wealth from their work. From 2012 to 2016, more than 20% of Black, Asian, and Latinx New Yorkers remained at or below the poverty line.³ While the number of Black-owned businesses grew 30% from 2012 to 2017, Black-owned businesses still account for only 3.5% of all businesses in New York City, though Black New Yorkers make up nearly a quarter of the city’s population.⁴

The pandemic has only heightened these disparities. Workers of color have faced greater job losses, undocumented immigrant workers have been excluded from the social safety net, and minority-owned businesses have been least likely to access government relief.^{5, 6, 7} Nationally, Black-owned businesses closed at nearly twice the rate of white-owned businesses between February and April 2020.⁸

The City’s economic recovery must prioritize New Yorkers of color who have borne the brunt of the pandemic’s health and economic impacts. The potential growth in the retrofit market makes this a high-opportunity investment area for the City to support minority-owned businesses and “high road” jobs in Black communities and communities of color most affected by COVID-19.

The City’s Minority- and Women-owned Business Enterprises (MWBEs) certification program ranks among its key tools for supporting equitable wealth generation. Through targeted programs, policies, and capital products, the Mayor’s Office of M/WBE helped the City to award over \$10 billion in contracts to MWBEs between 2015 and 2018 alone.⁹ Supporting these minority-owned businesses is a powerful pathway to building community wealth.

However, the reach of the City’s MWBE certification is necessarily limited in a market like building energy efficiency retrofits, which will grow largely in the private sector. Even in the public sector, there remain major barriers to MWBEs in meeting the City’s certification requirements and competing for contracts. Thus, this report takes a broader lens on supporting minority-owned businesses to capture private and public market share through pathways beyond direct MWBE certifications.

This report also considers cooperative approaches to business creation and wealth generation. History shows that businesses owned and run by minorities and women have been at the forefront of innovation, not just in product design and technology,¹⁰ but also in the formation of new economic models and ways of working. In the United States, African American communities have been leveraging shared capital to build farms, housing and places of worship for centuries. Building on community-based cooperative

practices, employee owned business models — wherein employees own the businesses they work for — offer promising pathways for building wealth among workers and communities of color.¹¹

To realize a truly equitable recovery, the City should utilize policy and economic development levers to shape the retrofit market so that employee owned firms can meaningfully compete at scale with incumbent businesses. With City support, working New Yorkers stand to benefit from increased worker voice, job security, broad profit participation, and asset ownership opportunities that will address the widening racial wealth gap. In emerging markets like the energy efficiency retrofit market, the City has a critical opportunity to seed support for employee owned businesses in the early stages of market formation.

About the Forefront Fellowship



In 2020, the Urban Design Forum partnered with the Office of the Deputy Mayor for Strategic Policy Initiatives J. Phillip Thompson to research innovative strategies for equitable business development in the retrofit market. The Forum convened a diverse group of 26 emerging leaders in planning, design, policy, and advocacy to complete this research as part of the Forefront Fellowship. Fellows spent three months studying forecasts for Local Law 97 implementation, surveying the retrofit market, and understanding

the needs of MWBE owners. They ultimately interviewed over 40 New York-based and national stakeholders to produce market insights and proposals for advancing equitable business development.

Forefront Fellows examined innovative models for building retrofits, such as the Energiesprong approach to net zero retrofits. They spoke with stakeholders across City and State agencies to assess the current landscape of public efforts to galvanize the retrofit market. They learned from MWBE owners working across the five boroughs of New York City to understand the needs and concerns of small businesses. They interviewed architects, community leaders, policy experts, and researchers. Through this research, Fellows generated wide-ranging proposals for equitable business development that the Forum has compiled in this report.

About This Report

The Forefront Fellows' work culminated in a collection of market insights and proposals for supporting business creation and growth for minority-owned businesses and employee owned businesses in the growing retrofit market.

The first section of this report, "Insights," analyzes opportunities for MWBEs and employee owned businesses to capture market share in the emerging retrofit market. A series of insights highlights key considerations for policy or programmatic interventions, ranging from the parallels between the retrofit market and construction industry to the need for a new paradigm for innovation. Each insight is accompanied by a series of relevant challenges and opportunities.

The second section of this report, "Proposals," presents 10ca proposals for programmatic interventions that address some of the most promising

pathways highlighted in "Insights." These proposals aim to achieve four distinct goals for equitable economic development in the retrofit market: (1) supporting minority- and women-owned businesses in capturing market share; (2) expanding employee ownership among existing and new businesses in the market; (3) renewing targeted workforce development efforts to support businesses' needs; (4) and catalyzing new approaches to innovation.

These proposals seek to launch MWBEs and employee owned businesses to the forefront of the retrofit market. They consider innovative financing and partnership models to advance inclusive business development. And whenever possible, they present low-cost or no cost options that may be feasible within the City's current fiscal constraints.

As we work towards a more just and resilient city, New York City must align its climate action goals with an equitable economic recovery and close the racial wealth gap. We hope the research compiled in this report can help point the way forward.

Insights



Equitable business development in the retrofit sector requires bold, coordinated action across a fragmented landscape. The insights presented here summarize key market dynamics, including challenges to increasing market share for MWBEs and employee owned businesses and promising opportunities for investing in equitable economic development.

Insight 01

Without intervention, the retrofit market risks becoming an extension of the construction and real estate development industries dominated by the same players and inequitable dynamics.



While energy efficiency retrofits are often framed as a new market, many incumbents in adjacent industries are poised to capture market share over and against new entrants. Businesses in related industries like construction and the building trades require many of the same skills and expertise and are well-positioned to provide retrofit services at scale. Major real estate actors who own buildings subject to Local Law 97 and privilege existing relationships with contractors will influence the market through contracting decisions for their portfolios.¹² The City must steward the retrofit market to protect against prevailing inequitable market forces and actors in

adjacent sectors for inclusive business growth.

Challenges

- 1. The technical and regulatory knowledge required to compete in the retrofit market could replicate existing disparities between large construction firms with back-office resources and smaller firms without.**

For many small businesses and startups, the regulatory and administrative challenges of applying for new professional certifications, getting trained

in new technologies, and navigating new financing structures create barriers and disincentives, making it harder to act quickly and capitalize fully on the opportunity afforded by Local Law 97.^{13,14} By contrast, larger firms equipped with dedicated administrative staff and greater operating capital do not face these same barriers, providing them a potentially significant first-mover advantage. Without intervention, these barriers are poised to be replicated in the retrofit market, impeding inclusive business development and further entrenching existing disparities in the construction and real estate industries.

2. The City must diversify its inclusive business development offerings beyond MWBE certification and public procurement to extend support to minority- and women-owned businesses more generally.

Although public procurement remains an enduring strategy for MWBE sustainability, City contracts can also place a ceiling on growth. Limited opportunities for prime contractor contracts, high supply of subcontracting opportunities, and long payback periods for subcontractors reinforce a cycle of limited growth. MWBE subcontractors face challenges in maintaining adequate cash flow, impacting their ability to bid on larger projects and subsequently inhibiting their ability to demonstrate business growth for other clients and capital sources. Moreover, given that Local Law 97 primarily impacts privately-owned buildings, most energy efficiency retrofits will take place in the private market, beyond the scope of public procurement and strategies for inclusive business development through MWBE certification.

3. The need for increased investment and operating capital in an unproven and capital-intensive market disadvantages MWBEs, which face greater barriers to accessing financing.

The structural disparities MWBEs face accessing capital are not unique to the retrofit, building energy efficiency, or construction industries, but financing barriers are of particular concern in this capital-intensive market.^{15, 16} Retrofit projects require contractors to meet an array of capital needs, from project-based umbrella insurance to construction bonding.¹⁷ Larger incumbent businesses have meaningful advantages through deep professional and personal networks that provide easy access to capital and information. New entrants and MWBEs typically do not have similar networks to capital and information, weakening their positions against incumbent large businesses.

“Contractors are saying, ‘You don’t have the financial capacity to take on this opportunity,’ while banks are saying, ‘You don’t have the opportunities to access this capital.’ It’s a vicious cycle.”

—Kenneth Thomas, Minority & Women Contractors & Developers Association (MWCDA)

New entrants may face additional challenges due to the perceived uncertainty of this new market by institutional lenders. Because the retrofit market is nascent and hasn’t achieved certain economies of scale, the financial risk assumed by new entrants will be greater and require more upfront capital than if they were to take on traditional construction or development work. These dynamics compound existing capital access challenges for MWBEs and work to dissuade smaller prospective market entrants from participating in the retrofit market.

Opportunities

- 1. The City could invest in pivoting existing MWBEs from the construction to the retrofit market.**

MWBEs working in traditional construction trades such as HVAC systems, plumbing, and electrical are well-positioned to transition to the retrofit market.¹⁸ While energy efficiency retrofits often rely on these traditional construction trades, many MWBEs do not currently have the appropriate training, insurance, financing, or technical/manufacturer certifications to qualify for retrofit work. For example, in the air source heat pump industry, if a MWBE contractor wants to be approved by NYSERDA to do air source heat pump installation, they not only need a universal refrigeration license — which most contractors will already have — but they must provide proof of insurance for the entire year. However, most contractors in traditional construction trades will purchase insurance on a project-by-project basis.¹⁹ The City could invest in transitioning these legacy businesses to the retrofit market.

2. Anchor institutions across New York City could drive at-scale retrofit work with meaningful MWBE participation.

Across the city, large anchor institutions have the potential to lead on pandemic economic recovery — and to do so through retrofit work. While some of these institutions, such as hospitals and healthcare centers, are held to less stringent requirements and timelines under Local Law 97,²⁰ many of these organizations are sizable property owners whose buildings could benefit from energy efficiency retrofits.²¹ For instance, Columbia University, New York University, Mount Sinai Medical Center, and New York-Presbyterian Hospital rank among the top 20 property owners by square footage in New York City.

Unlike most private property owners, many of these organizations have made explicit diversity and local hiring commitments that could act as an entryway into the market for MWBEs across the retrofit service spectrum.^{22, 23, 24} Some anchor

institutions have gone a step further in lowering the barrier to entry for MWBEs by adjusting their financial or contracting requirements. Wherever possible, the City should incentivize anchor institutions to undertake large retrofit projects and connect them with a broad range of MWBEs to fulfill those contracting needs.

3. City-led procedural incentives for MWBE hiring could help foster a more democratic retrofit market.

The City should explore every opportunity to encourage MWBE contracting across the retrofit process through targeted regulatory interventions impacting both public and private procurement and certified and non-certified MWBEs. Potential levers include expedited permitting or reduced permit application fees, prioritized property assessed clean energy (PACE) financing applications,²⁵ or facilitated technical certification and pre-approvals. These benefits could be multiplied through coordination and partnership with both State-level agencies as well as large utilities companies like National Grid and Con Edison (ConEd). In addition to MWBE contracting, similar strategies could apply to community hiring guidelines to create more racially- and geographically-diverse participation in the retrofit workforce, building on the community hiring program for renovation construction on City-owned buildings that Mayor De Blasio announced in August 2020.²⁶

**“We’ve seen some anchor institutions that don’t require MWBEs to be bonded. They can also forego or adapt some of the insurance policies in construction projects.”
—Dynishal Gross, New York City Department of Small Business Services**

Insight 02

The scale and complexity of energy efficiency retrofits creates a demand for full-service or “turnkey” offerings, which disproportionately favors larger, established businesses.



A comprehensive energy efficiency retrofit requires a diverse set of skills across data analysis, systems engineering, various trades, and building operations. Even within these sub-disciplines, new technologies are continually emerging and best practices are regularly being updated. Property owners, whose expertise is often not technical, cannot realistically stay abreast of these shifts and be able to accurately articulate their technical needs as they scope their own retrofits.

The complexity of the problem has led to high demand for a simple, straightforward solution that

is full-service or “turnkey,” which has in turn encouraged the rise of all-in-one providers who can manage the financing, bureaucracy, and various technical aspects from planning to implementation. While this may eventually achieve the positive outcome of making retrofits more accessible, the companies that are currently able to provide these full-service solutions are engineering and sustainability consulting firms that are usually well-funded, well-established, and white male-owned rather than smaller businesses or MWBEs. Of the top twenty largest New York City engineering and design firms listed by Engineering News

Record in 2020, nearly all of them had white male CEOs, with only one woman of color appearing as co-CEO and a handful of women holding seats in shared governance structures.²⁷

"The market is looking more and more towards 'turnkey' or one-stop-shop solutions. They are no longer using separate energy auditors, engineering teams, and contractors."

—Marc Zuluaga, CEO, Steven Winter Associates

Challenges

- 1. Small companies may struggle to compete successfully against larger firms who have greater capacity to serve owners of large building portfolios.**

The majority of buildings covered by Local Law 97 comprises over 2.5 billion square feet of large multifamily and large commercial developments,²⁸ most of which are owned by a small number of large development and property management companies.²⁹ Property owners who are undertaking retrofits across many sites in their portfolio will likely seek out contractors that can service as many buildings as possible at once. Due to the extensive labor and high operating capital needed to fulfill these multi-development retrofit projects — particularly if building owners seek turnkey solutions — many MWBEs will miss out.

Opportunities

- 1. Unbundling large contract scopes could engage small businesses or MWBEs who are capable of taking on more focused parts of the retrofit process.**

When projects are scoped and contracts written

for a single service provider who can take on the myriad technical needs, small businesses and MWBEs with specialized skill sets are unable to meaningfully compete for work that they may be well equipped to take on in some part. In public sector MWBE contracting, where a similar challenge of oversized contracts has arisen, some have called for strategically unbundling large contracts to create a more accessible bidding process — an approach that could also be taken up by the private sector.³⁰

Contract unbundling could be promoted widely in the private sector through public education campaigns and programmatic advisory supports like NYC Accelerator to assist landlords in better scoping their retrofit projects. While landlords may be reluctant to take on complicated, multi-firm contracts, this approach may also enable them to leverage Zero Over Time strategies that lower short-term costs while generating phased scopes.³¹ Ultimately, targeted contract scopes would encourage greater competition and more opportunities for MWBEs in the retrofit space.

"Doing a retrofit is asking people to go to a cell phone shop and asking them to pick not only the phone, but the receiver site, the base station, and the financing package. Essentially we're asking people to select things they don't have expertise in or even understand clearly."

—Amy Egerter, Rocky Mountain Institute

- 2. Programmatic support and strategic communications could encourage collaboration and joint ventures between MWBEs.**

Framed positively, the diverse disciplines required to undertake an energy efficiency retrofit also present a valuable opportunity for collaborative business models. While the Mayor's Office

of M/WBE is already exploring the idea of joint ventures broadly, the retrofit market presents a strong potential testing ground for many of these approaches.³² For instance, small manufacturers could team up with others to make prefabricated products that provide small, different parts of a whole building solution.³³ Public communications targeted at MWBEs could raise awareness about joint ventures and cooperative structures, while robust programs and services could help these prospective collaborators understand the legal, operational, and financial nuances of this new way of working. The New York City Department of Small Business Services (SBS) could act as a convener of diverse but complementary MWBEs in the construction, trades, utilities, and real estate sectors to facilitate these kinds of connections.

Insight 03

New and existing workforce development must be coordinated with business development efforts to ensure that training opportunities lead to hiring.



Previous green jobs training programs have not resulted in successful hiring pipelines and fell short of achieving equity goals. In order to ensure that investments in workforce training achieve meaningful impact, City and State agencies must push for accountability in hiring goals to ensure that training pipelines lead to jobs. At the same time, agencies and funders supporting business development need to coordinate closely with training programs to ensure that trainees have the appropriate skills and connections. Equitable hiring metrics should also be emphasized as part of business

development and used as criteria for funding programs where feasible.

As with investments in new building technology, if contractors and other firms wait until 2024 to start thinking about hiring, there will not be a skilled workforce available. Both workforce development agencies and businesses must understand the timeline for carbon reduction targets and plan to scale up hiring along that timeline. The current approach is deeply siloed and in need of integration to respond to current challenges.

Challenges

1. **The failure of the Obama-era green jobs program and the misuse of the term “green jobs” has created confusion and frustration in the workforce development sector.**

During the Obama administration, the Department of Energy devoted considerable resources to energy efficiency, solar technology, and weatherization with the promise of creating millions of green jobs.^{34, 35} However, due to a lack of strong oversight and accountability, and an absence of an accompanying business development strategy these investments failed to yield significant numbers of new jobs — businesses were not able to grow and develop to generate the work needed for job seekers at scale. Workforce agencies scrambled to create training programs, but the jobs never materialized for trainees. Several stakeholders cited the disappointment of those programs and the importance of avoiding similar problems in the rollout of Local Law 97.³⁶

An additional challenge is that “green jobs” has become a buzzword, leading to a proliferation of so-called green jobs that are low-wage and low-impact, such as painting building roofs white or changing to energy efficient light bulbs.³⁷ Without clear metrics for high-quality jobs and high-impact technologies, the rollout of Local Law 97 will fail to achieve both climate and equity goals.

“This is not about green jobs or green workforce training, it’s about green careers. We talk about jobs as if they’re divorced from people. We need to invest in people at multiple points where they need support, not just get them in the door.”

—Bomee Jung, New York City Housing Authority

Opportunities

1. **The City and State could scale and replicate viable pilot programs for building green jobs and careers.**

“I learned building management systems and skills when I became a Local 3 apprentice, as I was already interested in green tech, but not all electricians in unions are focusing on energy efficiency work.”
—Lowely Cheung, Member, IBEW Local 3

Pilot programs that are successfully pursuing a long-term training strategy and connecting workers to jobs offer lessons and opportunities for scaling. Successful programs prioritize long-term support and wraparound services, on-the-job training and internship or apprenticeship opportunities, strong relationships with hiring entities, and clear hiring metrics. Several stakeholders emphasized the importance of on-the-job training over classroom experience.³⁸ State funding available through channels including the Climate Leadership and Community Protection Act (CLCPA) could further support these programs. For example, Green City Force relies on a very high level of case management and wraparound services to train and place youth at contractors who are working with NYCHA, which is bound by Section 3 hiring requirements. Energy service companies who have to comply with Section 3 are another example worth exploring further along the career pipeline. Some of these companies have developed strategies to invest in and retain their best workers. Other promising efforts that emphasize on-the-job training include NYSERDA’s partnership with ConEd to train workers on heat pump installation and training programs linked to union apprenticeships, like Nontraditional Employment for Women (NEW).

2. Developing training programs and business capacity in relevant fields beyond construction and manufacturing could broaden opportunities in the retrofit market.

Since construction and manufacturing are both labor- and capital-intensive, many of the workforce development efforts related to Local Law 97 have focused on construction and manufacturing. In addition to those fields, City agencies and private sector partners should develop workforce capacity in fields such as building management and equipment installation that will be key to Local Law 97 compliance. This may involve upskilling existing and incumbent workers who possess skills that are transferable to the clean energy workforce as well as training new entrants.

As buildings shift to clean and smart technology, there is an opportunity for contractors who specialize in installing and maintaining heat pumps, hot water pumps, and other technology. While there are many contractors who serve single-family or 1-4 unit homes, there are fewer mechanical contractors that serve larger buildings — and those contractors often service many buildings. There are also few companies providing owner’s representative services focused on assessing options for retrofits and upgrades.³⁹

Insight 04

A new paradigm for innovation is needed to advance inclusive business growth in clean technology.



In an emerging market, the opportunity to get advice, acquire the necessary certifications, connect with training resources on new technology or meet niche manufacturers prior to an influx of contracting opportunities is key. Without direct links to accelerators or other innovation-focused spaces offering such tools, MWBEs breaking into the energy efficiency retrofit market risk falling behind. Lacking support to expand, pivot, or strengthen their business offerings, MWBEs face tokenization and relegation to subcontractor status, missing opportunities to lead in the sector.

Challenges

- 1. When MWBEs are contracted to fulfill a diversity requirement without meaningful opportunities for contribution, growth, or financial stability, MWBEs are not perceived as meaningful business partners or as a source of innovation.**

Existing, short-sighted perceptions of the value of MWBEs lead to contractors seeking MWBE

participation only to fulfill public procurement requirements. Even then, MWBE owners have seen larger contractors ask to use their stamp on a project without actually engaging their services in order to meet public procurement requirements.⁴⁰ This tokenization erodes trust in relationships between primes and subcontractors. When MWBEs are perceived as a required check box, the innovation landscape overlooks the valuable potential contributions new and existing MWBEs could make in an emerging market. Without strong networks and support from well-resourced incubators, accelerators, and other service providers, MWBEs are set up to fail.

“[The industry] needs to give opportunities to other MWBEs, not just trades. It has not yet accepted that MWBEs can offer valuable engineering, policy and community engagement perspectives.”

—Daphany Rose Sanchez, Kinetic Communities Consulting

2. New York City’s lack of industrial land and affordable manufacturing space poses barriers to R&D and new business development in the clean energy sector.

Due to a legacy of disinvestment in industrial areas dating to the 1970s, New York City sees intense competition for industrial- and manufacturing-zoned land. As emerging firms reach the stage of bringing new technology or prototypes to market, they struggle to find affordable space for production.⁴¹ The lack of affordable industrial space also poses challenges for conversions to employee ownership. Many legacy businesses also own their property. When cooperative conversions take place, the cooperative needs additional financing to purchase the property, but worker co-ops are not currently eligible for U.S. Small Business Administration (SBA) 504 loans

or New York City Industrial Development Agency (NYCIDA) financing.^{42, 43} If the cooperative is not able to purchase the property, they may decide to relocate, but finding affordable space in New York City’s industrial zones remains a challenge.⁴⁴

Opportunities

1. Leading with racial equity and environmental justice principles could shift perceptions of MWBEs to drive investment in MWBE leadership and innovation.

The Principles of Environmental Justice articulated by delegates to the First National People of Color Environmental Leadership Summit in 1991 provide a guiding framework for the environmental justice movement grounded in anti-racism, sustainability, and collective responsibility. Embedding these principles in the goals of climate policy such as Local Law 97 could help reframe MWBEs as key partners in confronting environmental racism and leading the city to a zero-carbon future.

2. Opportunities for MWBEs to showcase their work could shift industry perception to value their experience and results, not just their certification.

Dedicated spaces to showcase MWBE firms’ projects and expertise could counter the pervasive feeling among many MWBEs that they are being courted for their MWBE status alone. Elevating the profile of MWBEs could also help them to attract private sector opportunities. Innovation spaces or accelerators could host high-visibility showcases to help prime contractors access a larger network of MWBEs beyond their existing relationships.

Insight 05

Property owners' reluctance to invest in long-term energy upgrades hinders equitable business development.



The entrance of MWBEs and employee owned businesses into the retrofit market hinges on robust market demand. However, property owners and operators may be reluctant to invest in the long-term energy upgrades needed to comply with Local Law 97 for a number of reasons: The retrofit process is complex and requires interdisciplinary expertise beyond that of most developers or property managers. Many property owners are skeptical of the new requirements because they are not used to measuring energy use in terms of carbon emissions. Moreover, energy benchmarking is relatively well-known in the industry, but carbon emission reduction is much less familiar. Building owners who are familiar

with Local Law 33 (Building Energy Efficiency Ratings) and Energy Star may not be prepared for Local Law 97 compliance.

Furthermore, COVID-19 may have further lessened the urgency of Local Law 97 in the minds of property owners, as well as putting a severe strain on their immediate cash flow. COVID-related financial challenges may also affect property owners' eligibility for PACE and other funding opportunities if they cannot repay loans.⁴⁵

Slow adoption of energy upgrades may seem outside the scope of business development and workforce, but a holistic strategy to catalyze equitable

business development must coordinate with efforts to address this foundational challenge.

Challenges

1. **If building owners are reluctant to make proactive upgrades, there will be a scramble at the last minute for services that don't exist, reinforcing existing inequities in the market.**

Other than a few standouts who are focused on emissions reduction as part of their mission, many building owners and operators may wait until the last minute, or until they are fined, to pursue upgrades. If the demand for retrofit services is not activated over time, there will not be an adequate supply of vendors, services, and products available — and there will not be sufficient market demand to sustain more equitable business development strategies. In interviews, MWBE owners and individuals working in business development noted that MWBEs are not eager to enter the retrofit market because “the market isn't there yet.”⁴⁶

Opportunities

1. **Zero Over Time strategies could help property owners think of compliance in a more financially feasible and achievable way.**

The Zero Over Time approach developed by Rocky Mountain Institute focuses on long-term planning to make retrofits more logistically and financially feasible. This approach encourages building owners to plan and implement a series of cost-effective projects over a 20-year period that reduce energy use while increasing revenues.⁴⁷ This approach could also be used for buildings aiming to meet Local Law 97 targets, enabling building owners to incorporate the requirements into a long-term capital plan and synchronize

retrofits with trigger events in a building's life cycle, rather than scrambling at the last minute to carry out isolated retrofits.

2. **Reliable products and warranties could build consumer confidence in new technologies while also directing market demand.**

City agencies could help to build building owners' confidence in the value of carbon-saving technologies by introducing highly vetted products. As part of this effort, the City could partner with insurance companies for 5-year warranties or other guarantees that will reduce risk for building owners and operators. At the State level, NYSERDA has been a leader in this effort, working with engineers to provide additional verification and confidence. This approach could also help direct MWBEs towards viable products and technologies to integrate into their offerings.

“It is important to convince facilities staff and decision-makers about retrofits because they typically have been doing the same work for 30 years. If they put in a new, more energy-efficient technology with a high up-front cost, their job is on the line. We have to give them the tools they need to feel comfortable that it will work.”

—Pat Sapinsley, Urban Future Lab

3. **The City could leverage the scale of City-owned assets like NYCHA to model expectations for retrofits and offer a springboard for MWBEs to establish themselves in this market.**

While the majority of Local Law 97 retrofits will take place in the private market, City-owned assets can help launch MWBE participation in this market through public procurement. In particular, NYCHA's MWBE and resident hiring program could represent an immense opportunity

for MWBEs to enter this market. NYCHA is the largest residential landlord in the city, with more than 2,250 buildings in its portfolio, many of them over 50 years old. A number of unique challenges exist in meeting the Local Law 97 reduction targets for its portfolio, even though Local Law 97 requirements are less aggressive for NYCHA than the market in general. NYCHA's recently released Climate Mitigation Roadmap provides a path to compliance through a combination of electrifying heat for hot water and reducing in-unit consumption, but time is of the essence given the large, aged portfolio.⁴⁸

There are not yet enough firms to meet the need for NYCHA retrofits. Only a small cohort of firms is willing to do NYCHA jobs, because of difficulty in the procurement process. Moreover, these firms are often too niche to scale improvements. Coupled with other pathways described in this report for supporting MWBEs to build retrofit capacity and scale their offerings, NYCHA and other City-owned assets could provide a project pipeline for MWBEs to build experience and expertise that would transfer to the private market.

Proposals



The ten proposals below address generative opportunities to support MWBEs, employee owned businesses, workforce development, and innovation. While each of these proposals would, if enacted, provide targeted support, policymakers should also assess strategies to align multiple interventions and address intersecting opportunities in tandem. Bold efforts — like those below — are needed to advance truly equitable business development in this emerging market.

Supporting Minority- and Women-Owned Businesses



Problem

MWBE firms make up almost half of all firms in the private construction sector, yet struggle with low utilization — a challenge that will follow them to the retrofit market.⁴⁹ The same barriers that hinder MWBE development in adjacent industries, like construction, are heightened in the retrofit market. Starting or pivoting a business to the retrofit market requires specific training, certifications, and access to information (or technology) and significant capital — challenges that larger incumbent businesses are better suited to navigate than MWBEs. As more and more projects go to non-MWBE firms, existing and startup MWBEs are unable to get the experience necessary to win larger contracts to sustain and grow their businesses.⁵⁰

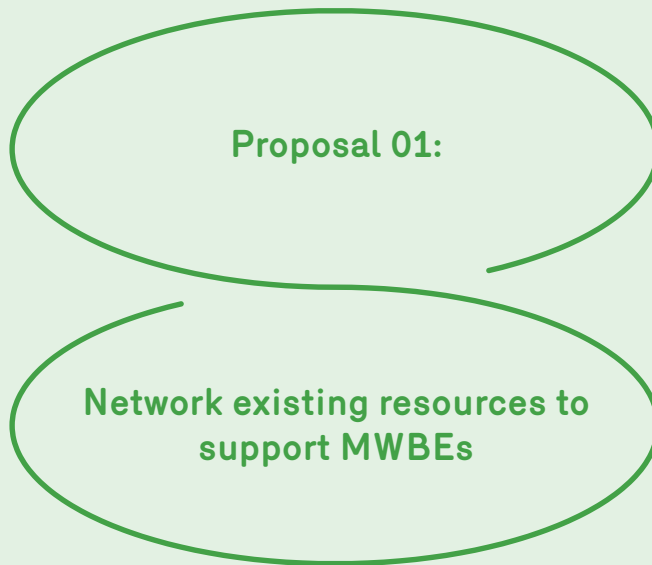
Although building and construction sectors already occupy a large percentage of energy efficiency work, there is still a lack of awareness of the opportunities and growth potential in the sector.⁵¹ Interviews with MWBE owners, tradespersons, and other individuals working in the energy efficiency sector uncovered that MWBEs face two prominent hurdles to entering the retrofit market: (1) lack of access to sources of industry-specific technical knowledge and supportive services and (2) lack of access to training for necessary certifications and other requirements for retrofit service provision.⁵² City investment could address these hurdles to ameliorate the risk of an uncertain market.

Strategy

The scale of the retrofit market will require robust public intervention coupled with efforts from unionized labor and private sector actors (including nonprofits) to realize a viable pathway for MWBEs to transition into this market. MWBE growth and increased market capture will come from connecting and supporting existing and

emerging MWBEs — including but not limited to City-certified MWBE firms — to resources to transition into the retrofit market.

With a focus on education and outreach, the City could convene a network of MWBEs and other stakeholders to improve access to information and resources. It could also invest in a targeted training initiative to support the pivot from traditional construction trades to the energy efficiency field. If the groundwork is not laid now for MWBEs to compete in the market, they will be left behind as both public and private contracts go to the larger, established businesses that are more equipped for contracts of scale.



Strategy

The City should convene a network of relevant stakeholders to expand access to information, training, and funding resources for MWBEs.

Existing City and privately-run programs that connect firms with necessary technical knowledge and information on industry-specific business processes are either prohibitively competitive — as is the case with accelerators or incubators — or decentralized and thus largely unknown to small MWBEs. A dedicated and widely publicized network would streamline the complex web of workforce and energy efficiency programming in the city to unlock information, training, and funding resources for MWBEs in the retrofit market.

Network stakeholders should include City and State agencies, private sector stakeholders, and nonprofits or community development organizations. Bringing together City and State agencies focused on workforce and energy efficiency retrofits would help MWBEs upskill their workforce in response to evolving policies and regulations for the emerging retrofit market. Private partners — including manufacturers, contractors,

consultants, and real estate actors — would link MWBEs to emerging innovations and efficiencies in the market. Community organizations will be necessary to reach MWBEs, localize impact in particular neighborhoods, and foreground equity goals. A membership-based network model should be explored to generate enduring value for MWBE businesses. In addition to democratizing access to information and resources, this network could adopt a knowledge-sharing model for MWBEs operating in the energy sector.

Value

Though the City is limited in its ability to provide direct support for needed services such as back-of-house administrative services and low-interest financing, it should leverage its ability to convene groups across a variety of sectors to proactively help MWBEs connect with relevant existing resources. This network will build the capacity of certified and non-certified MWBEs in the retrofit market.

Outcomes

The network would provide a high-visibility resource to attract the attention of MWBEs and

support their transition to the retrofit market. Centralized information would help MWBEs understand all relevant requirements, avoid surprise costs, and perhaps even connect with existing financing sources.

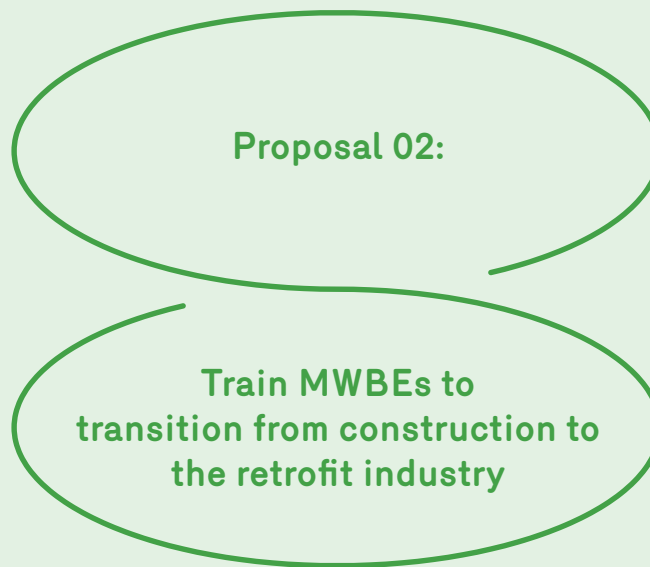
Precedents

The following courses and training programs that allow for specialization in the construction industry and ultimately result in certification are specifically targeted towards MWBEs. Information and access to these programs, and others, can be better mobilized through the proposed network to encourage participation:

- Nontraditional Employment for Women (NEW) trains and places women in careers in skilled construction and maintenance trades.⁵³
- CSKILLS Apprenticeship Readiness Program provides training and direct entry access to New York City public high school seniors and other residents seeking careers in construction trades.⁵⁴
- Pathways 2 Apprenticeship (P2A) is a direct entry pre-apprenticeship program that trains and mentors people from low-income communities for placement in union construction apprenticeship programs.⁵⁵
- NYCHA Resident Training Academy (NRTA) construction training program prepares NYCHA residents to receive skills and certifications to work in building trades.⁵⁶
- The Construct NYC program connects small to mid-sized MWBEs and other disadvantaged business enterprises to work on New York City Economic Development Corporation (NYCEDC) projects.⁵⁷
- The Building Energy Exchange (BE-Ex) is a physical center and network of individuals who serve as a resource with a focus on education around energy resources. In addition to offering trainings, the BE-Ex puts on

regular events on top of providing case studies and primers to support progress towards increased energy efficiency.⁵⁸

- The Center for Social Innovation (CSI) runs a Climate Ventures incubator. CSI is a nonprofit social enterprise that provides coworking, community, and acceleration services to social entrepreneurs and innovators. Originally established in Toronto, Climate Ventures is a cross-sector climate solutions incubator that supports trailblazing entrepreneurs, policy-makers, farmers, investors, Indigenous Peoples, journalists and more. With a strong network of enterprises, and advisors, Climate Ventures generates and supports climate solutions through workshops, peer groups, and what they call a “climate consultancy developing programs in partnership with funders to support and scale climate solutions.”⁵⁹



Strategy

The City should invest in a targeted training initiative to prepare MWBEs in the construction industry to meet new demand for the installation and maintenance of retrofit technology.

Transitioning into the energy efficiency retrofit market requires businesses to acquire new skills, certifications, and warranties. Among these challenges, the City could address manufacturer requirements that enable contractors to install specialized equipment through a low-cost training initiative.

Large multinational manufacturers often have their own unique standards and restrictions for firms to act as manufacturer-verified installers, including requiring in-factory training, equipment sizing standards, customer service standards, and sales and installation quotas. Many manufacturers will not warranty equipment if it is not installed by a non-certified installer, as a means of ensuring quality control. Most local contractors have existing relationships with local suppliers and distributors, but may not be connected to the right contacts for procuring and installing energy efficiency equipment.

While some MWBEs are able to weed through the challenges and costs of this opaque and burdensome system, the City could even the playing field by creating greater transparency and access to necessary certifications.

The City should develop a training initiative consisting of modules focused on a variety of in-demand energy efficiency products, with actionable certifications at the end of each module. The City or a contracted program operator could build the training curriculum through partnerships with manufacturers and certification entities, who would be incentivized to participate because they would benefit when more vendors and practitioners were trained — more certified installers means more marketing and sales for a product across the city.

Manufacturers would be invited to adapt their existing off-site training programs to convene in New York and train MWBEs to install their products. Manufacturers would also be required to award marketable certifications and warranty benefits to MWBEs who have successfully completed the program module. Proposed curriculum modules include, for example:

- **Daikin Comfort Pro:** Service and installation of split-system units and Energy Recovery Ventilators (ERVs). Certified contractors are featured on the manufacturer website and have access to order and install the full line of products. There are currently 5 Daikin Comfort Pro contractors in New York City, and one is an MWBE.⁶⁰
- **Mitsubishi Electric Diamond Contractors:** Service and installation of split-systems units and ERVs. Certified contractors receive additional finance and warranty opportunities. There are currently 11 Diamond Elite contractors in New York City, and none are MWBEs.⁶¹
- **Trane Comfort Specialist:** Service and installation of split-system units and ERVs. Specialists can offer additional financing options for their services. There are currently 9 Comfort Specialist contractors in New York City, and none are MWBEs.⁶²
- **Carrier Authorized Dealer:** Service and installation of split-system units and ERVs. Authorized dealers are featured on the carrier website. There are currently 45 authorized dealers in the New York City area.⁶³
- **York Certified Comfort Expert:** Service and installation of split-system units and ERVs. Certified experts are promoted on the manufacturer website and have a 100% satisfaction guarantee. There is currently 1 certified comfort expert in New York City and it is not an MWBE.

Value

The City must prepare local companies to meet the demand created by Local Law 97 now, before more outside firms begin to move into New York City to meet the demand for energy efficiency retrofits.⁶⁴ As a 2010 report by Berkeley National Laboratory on the energy efficiency services sector noted, most firms providing energy efficiency services are small (under 10 people),

with few very large firms.⁶⁵ However, small MWBEs are reluctant to invest upfront time and money in understanding this new market, training their workforce, and seeking out the proper certification without support and incentives.

This training program would benefit MWBEs by increasing the scope of work that they can competitively bid for in both public and private contracts in the short term, and positioning them to capitalize on the expanding retrofit market in the long term. This program would also benefit manufacturers by increasing their exposure to the New York retrofit market and ensuring that their equipment is installed properly throughout the city. Manufacturers should be incentivized to invest in this partnership with the City as a first-mover advantage against competitors.

Outcomes

This program would provide industry-recognized certifications for MWBEs to leverage the full benefits of building energy efficiency technology, including increased marketing, financing, and warranty services. MWBEs who completed one or multiple training modules would be able to expand service offerings. By expanding the pool of contractors certified in specialized retrofit technology, this initiative would also encourage the sale and use of building energy efficiency technology citywide, helping the City to meet Local Law 97 targets.

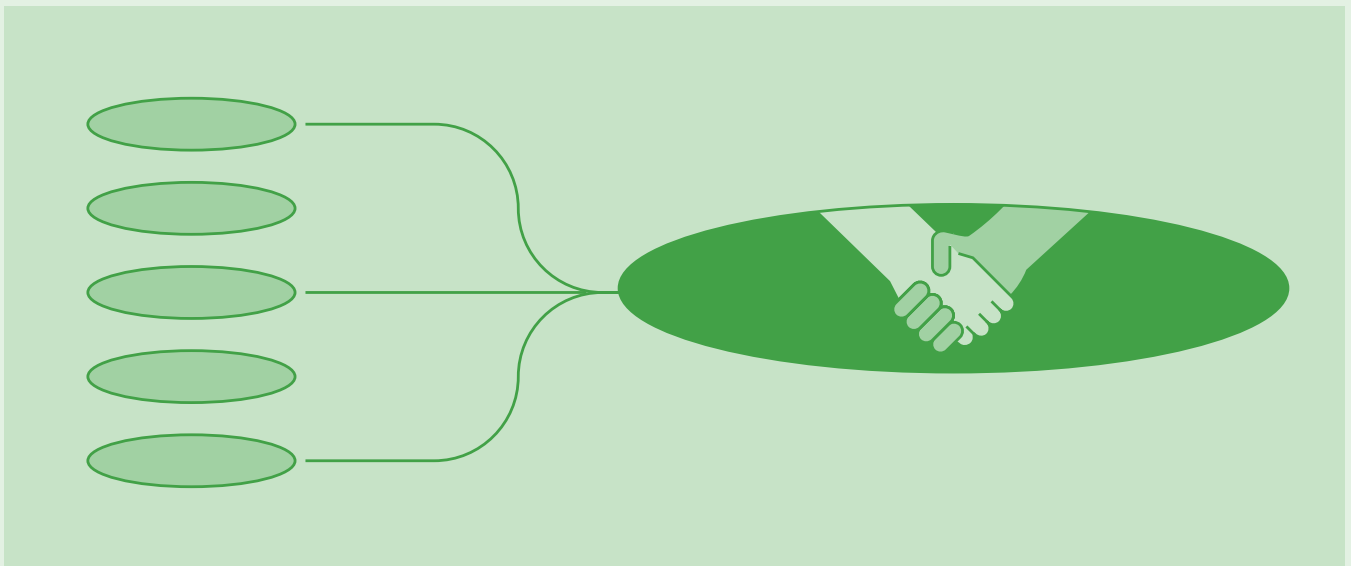
Precedents

Small business training exists in many forms and locations within public and private entities. These examples could be consolidated and focused specifically on transition to green energy efficiency through the proposed targeted training initiative:

- SBS and the Mayor's Office of MWBE provide training and resources ranging from one-on-one technical support to 28-week mentorship.⁶⁶
- Private technical assistance centers administer trainings and certification programs through government agencies like the Environmental Protection Agency (EPA),⁶⁷ which qualify contractors to apply for various NYSERDA,⁶⁸ ConEd,⁶⁹ and National Grid Programs.⁷⁰
- NYSERDA provided funding and partnered with Hudson Valley Community College to create training programs for clean energy jobs, focusing on commercial and residential energy efficiency.⁷¹
- Organizations like Kinetic Communities Consulting,⁷² M-Corps,⁷³ and Business Outreach Center Network⁷⁴ support and train small businesses in various aspects of their business.

The key differentiator of this proposal is to bring the training that manufacturers provide at their own facilities to an accessible location in New York City. Direct training in green products and services will position MWBEs to market and install building energy efficiency technology throughout the city.

Expanding Employee Ownership



Problem

In the emerging energy efficiency retrofit market, the City has a critical opportunity to seed support for employee owned businesses in the early stages of market formation. Despite the benefits of employee owned businesses — greater worker voice, profit participation, and increased business productivity — these models have not been widely adopted among New York City’s small businesses. The City’s recent Employee Ownership NYC initiative, as well as the wider network of New York-based organizations promoting cooperative development, provide a basis for embedding employee ownership in the retrofit market.⁷⁵

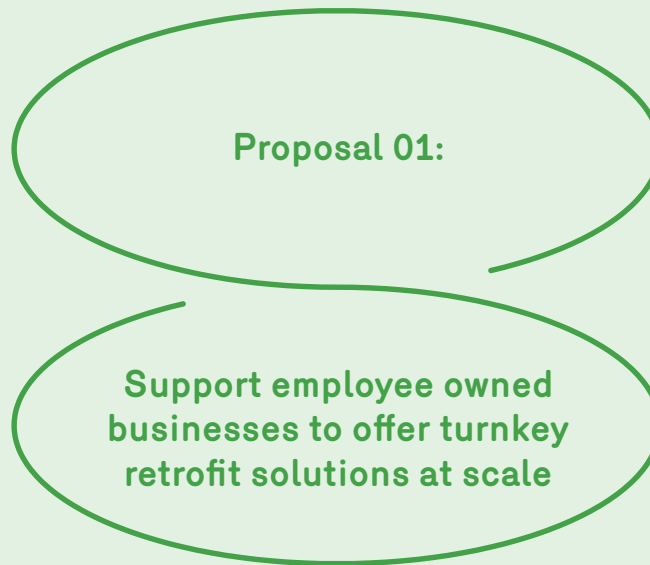
Yet cooperative business models are inherently difficult to scale, a challenge that employee owned businesses will need to contend with creatively in order to flourish in the retrofit market. Many small and MWBE businesses are unable to compete with larger incumbents for service provision given Local Law 97’s focus on large buildings and the “old boys club” nature of many segments of the industry. Moreover, the currently fragmented value chain around energy efficiency presents a challenge for building owners. As the market grows, increased demand for turnkey retrofit solutions may favor full-service solution providers over piecemeal services.⁷⁶ Organic growth to meet the demands of Local Law 97 may not be possible for small firms given workforce, training, and finance barriers. Cooperative development strategies in the retrofit market must contend with the predicted demand for integrated solutions at scale and its attendant challenges to realize an equitable economy.

Strategy

The energy efficiency retrofit market could serve as a test case for a “supra-cooperative” that brings together cooperatives across an integrated value

chain. A supra-cooperative that provides turnkey retrofit services could overcome scale challenges inherent to cooperative models by focusing on growth through a “coopera-merger”; join smaller cooperatives to enhance their competitiveness; and streamline the implementation of retrofits.

However, a phased approach is needed to develop the cooperative ecosystem in this market to a point where it can support a supra-cooperative. City efforts could first develop a pipeline of small cooperatives through capacity building, match-making, and business accelerator services. This comprehensive strategy to support cooperative conversion and development should be a key component of New York’s economic recovery and just transition.



Strategy

The City should advance cooperative business models among new and existing businesses, with the end goal of forming a supra-cooperative that merges services offerings along the retrofit value chain to offer turnkey retrofits.

This work can be achieved through a phased implementation. Early phases would build a pipeline of cooperative businesses well-positioned to participate in a coopera-merger and join smaller firms to boost their competitiveness. In the final phase, a supra-cooperative would merge multiple cooperatives offering complementary services to provide turnkey retrofits on the same scale as large incumbents.

While the arc of this work indeed takes time — perhaps 2-3 years — this is common for truly developmental, cooperative conversion processes. If implemented soon, this work can still be realized long before key milestones of the Local Law 97 policy goal itself (2024, 2029, and 2050 respectively).

Phase I: Pipeline

In the first phase, the City should launch two initiatives in parallel to support existing business conversions and influence new business formation, thus building a pipeline of small cooperatives.

The first initiative would support capacity-building and matchmaking for a cohort of existing businesses in the retrofit market seeking to convert to employee ownership. This initiative would target small and medium-sided MWBEs (11-50 employees) with an expressed interest in employee ownership models. Over the course of a year, a cohort of firms operating at two adjacent segments of the value chain (for example, renewable energy generation and battery storage, retrofit design and retrofit installation, etc) would be trained by a cooperative development institution in employee ownership models, the practice of business management, and employee-ownership conversion. Environmental justice nonprofits, City agencies, and building owners would also provide training related to requirements and opportunities in the retrofit market catalyzed by the Climate Mobilization Act (CMA).

While these trainings would anchor the program in direct capacity building for the participating cohort, the program would also be designed to build relationships, trust, connectivity, and collaboration among participants. At minimum, the program should aim to develop an ecosystem and network of like-minded energy efficiency-oriented MWBEs championing employee ownership principles. However, if successful, the program will match a number of program graduates across the two value chain segments and serve as the foundation for two or more such firms to jointly merge and cooperativize in a follow-on phase of the program.

Accounting for attrition inherent to both the nature and the duration of this work, this program should aim to attract at a minimum 20 businesses, roughly equally split between two adjacent segments of the value chain. Such a program would require (a) a physical or virtual location to provide the training; (b) financial resources to compensate the cooperative development and other training providers; and (c) the explicit endorsement of the City itself for the purpose of marketing, credibility, and City agency support.

The second, complementary initiative would establish a small business accelerator providing space, programming, community, and pro bono professional services to seed a pipeline of cooperatively-owned businesses and influence the principles around which emerging MWBEs grow. The accelerator would target emerging firms (1-10 employees) operating in segments of the value chain distinct from traditional tech.

The accelerator would provide programming and services to help refine businesses' energy efficiency retrofit-related products and services; broker introductions to potential partners, industry mentors, and established cooperatives; provide administrative and technical support; and train

businesses to build their business by centering cooperative principles in order to avoid capital-intensive conversions once the business matures. This initiative would require partnering with a City agency and/or existing cleantech accelerator that could provide the space and infrastructure to co-locate such firms, especially those operating in segments of the value chain distinct from traditional tech.

Even for a small number of firms, financial resources are particularly critical for this intervention, in light of the cost of physical desks to house firms and on-call support services for the duration of the accelerator. While future phases may grow cohort sizes, a founding cohort may recruit as few as five firms to pilot the model and demonstrate the program's proof of concept. This effort would aim to scale businesses trained in employee ownership as a medium- to long-term pipeline of businesses that may join the full-service supra-cooperative.

Across both Phase I initiatives, to ensure equitable outcomes, a community-centered approach must be employed to identify MWBEs that represent the target demographics. The matchmaking and accelerators initiatives should be advertised through community boards, communal spaces, and local networks.

Phase II: Connections

In the second, intermediate phase, the City should link together the matchmaking and accelerator initiatives, driving more explicitly and intentionally toward the creation of a full-service energy efficiency retrofit supra-cooperative.

At discrete points over the course of both interventions, existing businesses participating in the matchmaking intervention and emerging businesses participating in the cooperative accelerator

Expanding Employee Ownership

Adjacent Services				
Predevelopment		Design	Manufacturing, Installation & Construction	Operations
Feasibility	Design Solutions			
-	-	Engineering & Documentation	Manufacturing, Installation	Commissioning, Operations, Maintenance
Survey	-	Architect, Surveyor	-	-
Energy Analysis	-	Façade Consultant, Energy Consultant	-	Commissioner
Demolition	-	Architect, Surveyor	Demolition Contractor	-
Expeditor	-	Expeditor (Permitting)	Expeditor (Project Closeout)	-
-	Passive House Enclosures	Architect, Façade Consultant	Mason, Glazer, Curtain Wall Fabrication & Installation	Building Super
-	-	-	Vapor/Water Barrier Manufacturing & Installation	-
-	-	-	Insulation Manufacturing & Installation	-
-	-	-	Carpenter	-
-	Air Source Heat Pump	HVAC Engineer	Heat Pump Installer	Technicians, Maintenance
-	-	-	Sheet Metal Installers (Ducted Only)	-
-	Boiler Replacement	Electrical Engineer	Boiler Installer	-
-	-	Plumbing Engineer	Pipe Fitter	-
-	LED Lighting	Lighting Designer	Electrician	-
-	-	-	Carpenter	-

Table 1: Adjacent Services. This table provides an initial survey of possible adjacencies within the retrofit value chain that could be matched through Phase I and grouped through Phase II.

would participate in joint programming and networking events, building connectivity and fostering collaboration. This could happen, for example, during a “demo day” for the accelerator cohort.

The City should also ensure that future cohorts of both programs expand into adjacent segments of the value chain, increasing the breadth of participating businesses. This would expand potential value chain participation and expertise for the supra-cooperative.

Phase III: Supra-Cooperative

In the third and final phase, the City should bring together employee ownership-centered capital providers and cooperative development providers, with matchmaking graduates and perhaps larger accelerator graduates, to deliver the final outcome: a BIPOC-owned turnkey energy efficiency retrofit supra-cooperative. This supra-cooperative builds directly on the rapport and core skills developed over two distinct, if interwoven, interventions established in Phase I.

Once established, this supra-cooperative — which builds on precedents such as Main Street Phoenix — will be incentivized to bring in and cooperativize additional segments of the retrofit

value chain in order to expand their business remit, scale their operations, and become increasingly more competitive against traditional firms, while helping the City deliver on its ambitious environmental policy goals.

Value

At minimum, this initiative will help support new cooperative formation and business conversion to employee ownership models. However, with the right momentum, there is significant opportunity for the initiative to realize its full potential in both delivering cooperative business models while also providing turnkey retrofit services. While this initiative requires meaningful City investment, it represents an ambitious effort to demonstrate the potential of coordinated cooperative development in a new market, which may create a model for other emerging markets.

Outcomes

The proposed interventions embed economic democracy and equitable profit participation into emerging MWBE cleantech startups and construction firms where returns traditionally accrue to investors and management rather than workers. The interventions are designed

to increase the competitiveness of MWBEs by increasing their scale and the range of their professional practices/competencies. Participants will benefit from the creation of connective tissue and a supportive resource network for MWBEs that are committed to worker voice and profit participation.

Precedents

Several relevant precedents exist for this proposal:

- The Business Outreach Center Network provides connective tissue between like-minded, traditional underserved small businesses in New York and New Jersey.⁷⁷
- The Worker Cooperative Business Development Initiative (WCBDI) is a network of community development organizations working with SBS to spur and sustain the creation of worker cooperatives and help small businesses transition their businesses into the worker cooperative model.⁷⁸
- Collective services like those offered by the “matchmaking” cohort find precedent in private sector actors within New York City who have structured design-build services like Alloy Development’s delivery of 55 Pearl Street and 1 John Street,⁷⁹ or Peter Gluck & Partners role in the East Harlem School at Exodus House.⁸⁰
- The accelerator proposal mirrors existing incubators like Project Equity, which supports companies that help businesses convert to co-op formats and Shared Capital Cooperative, a Community Development Financial Institution (CDFI) loan fund that connects co-ops to capital financing.⁸¹
- The supra-cooperative may be modeled after Main Street Phoenix, which operates in the hospitality sector to purchase distressed or undercapitalized restaurants and convert them to employee ownership, or Amicus Solar, a cooperative of solar photovoltaic system

operation and maintenance services.^{82, 83}

- The City’s efforts to support building owner’s energy efficiency investment include the NYC Accelerator.⁸⁴ This program could be strengthened to better support both cooperative development and turnkey retrofit solutions for building owners.

Renewing Workforce Development



Problem

New York City’s clean energy and energy efficiency workforce development programs are critical to fostering an equitable green economy. Yet today’s workforce pipeline does not yet achieve the climate justice goals of training workers for green jobs while also expanding economic opportunity for New Yorkers of color. Critically, workforce development is not closely coordinated with business development strategies to connect businesses to talent and support MWBEs’ and entrepreneurs’ growth and needs.

There are gaps in outreach and marketing for recruiting new workers, while incumbent workers are reaching retirement age or in need of developing new skills as advanced technologies emerge. In addition, there is a lack of historical grounding in the ways institutional racism has impacted workforce and other interrelated systems through intentional policymaking, resource allocation, and more, resulting in additional systemic barriers for MWBEs and limiting opportunity and access. Current funding systems are not as nimble and responsive as this evolving sector demands, and pose barriers to innovations by grassroots organizations that have not previously accessed grants and other funding opportunities in the past.

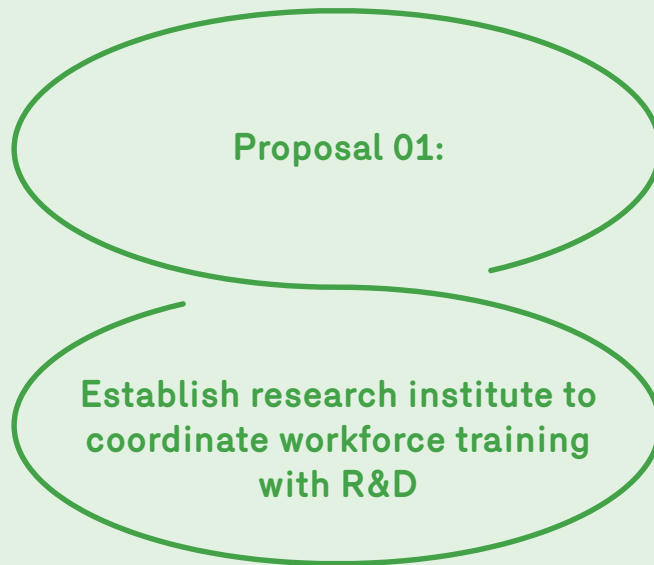
Strategy

Inclusive and equitable business development strategies can produce the jobs that graduates from emerging and existing workforce development programs can be placed into, thereby addressing demand for specialized talent, advancing job quality, and creating opportunities for wealth generation in communities of color.

To do this, workforce development programs should establish local partnerships to connect training to job forecasting as well as research and

development (R&D) of emerging technologies; recruit new workers and upskill existing workers; prioritize diversity, equity, and inclusion (DEI) standards and implementation; and set expectations for the equitable distribution of City and State funds. Industry stakeholders, including MWBEs and entrepreneurs, could benefit from workforce development resources and programs that focus on combating racism and other systemic barriers.

While each of these strategies addresses unique needs, they can also be combined for greater impact — for example, by equitably distributing resources to local, place-based service providers that are able to make better decisions about training curriculum through strengthened job forecasting and R&D intel.



Strategy

The City should invest in a coordinated research and training institution, collectively run by public, private, and nonprofit entities, to ensure efficient and accessible technology development and training resources that are linked to ongoing job forecasting.

Given the broad and disjointed landscape of actors at a city and state level implementing research and training in the clean energy sector, deeper coordination is needed to synchronize technology development, market analysis, and job forecasting with training curriculum development.⁸⁵ A central research institute could closely coordinate training programs with technologies emerging from R&D. Job forecasting emerging from the research institute could help further guide effective training. This level of coordination can also help direct an equitable distribution of resources to local, place-based service providers. Beyond training, all firms — including small firms with limited resources — would benefit from access to R&D.

Using the Mondragon Corporation’s Ikerlan research institute as a model for collective governance and equitable R&D distribution,⁸⁶ New York

City should invest in a coordinated research and training institution to make R&D accessible to smaller firms, develop training curricula that capitalize on emerging technology, and link ongoing job forecasting to training and business development. The institute would be collectively run by public, private, and nonprofit entities across the city and state.

The City could pursue a phased approach to bringing this institute to fruition.

Phase I: Coordination

The Mayor’s Office of Workforce Development (NYC WKDEV), SBS, and other NYC-based workforce development programs should establish coordination with: 1) existing R&D institutions such as the City University of New York (CUNY) and NYSERDA’s Research and Commercialization programs,⁸⁷ 2) NYSERDA’s Workforce Development Programs in conjunction with the New York State Office of Workforce Development,⁸⁸ and 3) CLCPA Just Transition Working Group’s jobs report.⁸⁹ This coordination can leverage existing statewide coalition meetings, but should ensure that New York City’s workforce development program developers are at the table to identify relevant opportunities.

Phase II: R&D Institute

After establishing a more coordinated approach that links workforce development to statewide job forecasting and existing R&D, New York should expand local R&D capacity by investing in a collectively-run research institute. A local R&D institute that prioritizes business development for MWBE entrepreneurs and small businesses could help diversify the retrofit business landscape. Building a collective or cooperative governance structure — modeled on the Ikerlan R&D institute in Mondragon, Spain — would help make sure that R&D knowledge is shared and distributed equitably. Further, the institute would create a natural setting for improving training capacity for workforce development programs. The training arm of an R&D institute could translate cutting-edge research in new energy efficiency retrofit technologies to updated curriculum for training programs to utilize. The institute could also house a lab for lower and higher education institutions to visit to enhance hands-on training, similar to Rotterdam’s RDM Training Plant.⁹⁰

Phase III: Cooperative Network

In the fullest potential of this proposal, a cooperatively-run R&D institute could support a network of cooperatives in the energy efficiency retrofit sector, once such a network is more robustly established. In this phase, the R&D institute would become a secondary cooperative modeled more fully on the Ikerlan model. Similar to Ikerlan, it will serve as the R&D capacity for smaller cooperatives to ensure they have access to the latest R&D in the sector and can compete with large businesses.

Value

Although New York City has a host of organizations and entities conducting research and training in the energy efficiency retrofit sector, there

are redundancies and gaps that must be addressed in order to support a more scalable and efficient workforce development landscape. The model of a cooperatively-owned institute allows for a central R&D institution instead of every business needing its own department, which prohibits smaller firms from benefiting from cutting edge R&D. Pushing the Ikerlan model one step further, this centralized research center would serve as a hub from which to coordinate and make more accessible research, training curriculum and facilities, and job forecasting. While New York City does not yet have a robust cooperative network, building an Ikerlan-like institution would support business development opportunities for small businesses and MWBEs entering the retrofit industry, until a more robust cooperative network is established.

Outcomes

A New York City-based and collectively-run research institution will serve three main purposes: (1) a clearinghouse for information, where ongoing R&D in building energy efficiency technology is accessible to entrepreneurs, new workers, and owners in the field who may not have capacity to do research on new technologies; (2) a training center to build capacity of existing programs with relevant curricula or expanded reach to more workers; and (3) a centralized coordinating entity that can work with NYSERDA, the State’s Just Transition Working Group, State and Federal Departments of Labor, unions and other groups forecasting jobs to understand federal, state and municipal job opportunities.

Precedents

Models exist across R&D, training, and job forecasting:

- In R&D, Ikerlan is a R&D cooperative in the cooperative network of Mondragon,

Spain. Ikerlan was founded in 1973 after Mondragon's founders realized they would need in-house research and development capacity in order to compete with global technological developments. Ikerlan is itself a cooperative, with over two hundred researchers and students, and housed in the Garaia Innovation Center.⁹¹ Ikerlan is linked with other research groups such as the IK4 Research Alliance and the Basque Science, Technology and Innovation Network. IK4 is an alliance that links six technological centers, whose mission is "the generation, uptake and transfer of technological knowledge and know-how, aimed at enhancing the competitiveness of the business fabric in its entrepreneurial environment, through innovation and in a global context marked by competitiveness."⁹² This proposal takes the Ikerlan model one step further, using a centralized research center as a hub from which to coordinate and make more accessible research, training curriculum and facilities, and job forecasting.

- In training, NYSERDA has numerous existing workforce training programs that demonstrate a nimble and multi-pronged approach. These strategies include on-the-job training, Clean Energy Internships, Building Operations and Maintenance training programs, Clean Energy Training Funding for training contractors, an online director of free Clean Energy Training Resources, and a database of training program examples. Such diversity of workforce training strategies allows a more responsive approach to evolving market needs.⁹³
- In job forecasting, The Worker Institute at Cornell convened the Labor Leading on Climate Initiative, which "advances knowledge, policies and practices to enhance the role of labor and working people in addressing the environmental and climate crises."⁹⁴ With its dual approach towards jobs and climate, this initiative provides an example of linking

research, training, technical assistance, and understanding actual job and employment needs of a new low-carbon economy.



Strategy

The City should convene and publicize training for workers in adjacent trades, such as construction, to transition to the retrofit market.

Many energy efficiency jobs are not new, but have evolved from existing occupations. Building and construction trades already occupy the largest share of jobs in the energy efficiency services sector, with approximately 65-70% of the total workforce.⁹⁵ However, workers in construction and the trades who possess skills that are transferable to the clean energy workforce are not being trained for these jobs at scale.

Federal funding requirements that primarily invest in entry-level training programs lead to gaps in training programs focused on upskilling incumbent workers. Meanwhile, a lack of exposure means that many workers are not even aware this pathway exists. For a robust talent pipeline and small to mid-sized firm business development, the City must improve the alignment between existing trades and energy efficiency education for incumbent tradespeople such as building operators, carpenters, construction workers, electricians, and HVAC technicians.

A comprehensive training strategy for energy efficiency retrofit jobs should entail equitable opportunities and distribution of apprenticeships, customized training programs, incumbent worker training, on-the-job training, bridge programs, and private/public partnerships. This training should support tradespeople who have vocational education, experience, and/or training and either seek to increase their skillset (“existing tradespeople”) or are employed by a specific business who seeks to support their further training for the joint benefit of the employee and the business (“incumbent tradespeople”). Training would target MWBEs who may already be in the retrofit sector or are interested in entering the retrofit sector but lack staff explicitly qualified to take those jobs, as well as individual tradespeople who operate as sole proprietors or self-employed who are interested in entering the retrofit sector.

The outreach and marketing of the program would be done by traditional marketing, including dedicated cold calling, emailing, and in-person outreach. After outreach, there would be information sessions for both businesses and individuals. Existing tradespeople would go through a paid part-time apprenticeship program at an existing energy company. Incumbent employees would

individually or collectively attend a paid training program provided by an energy efficiency retrofit training provider.

Value

The energy efficiency retrofit sector is a high-wage, low formal education sector, making it a great opportunity for partnerships between private firms, training providers and workforce development programs. The structure for these programs exists — including through SBS models for successful apprenticeships, customized training, and pre-apprentice programs — however they have not been widely implemented in the retrofit sector or tailored to incumbent tradespeople.

Investing in incumbent workers is a critical layoff aversion strategy for small and mid-sized companies at a time of historic worker displacement. It is also a path to better equity in the workforce.⁹⁶ Incumbent worker training benefits both the employee and the employers, as existing small to midsize businesses can increase their offerings making them eligible for more business opportunities.

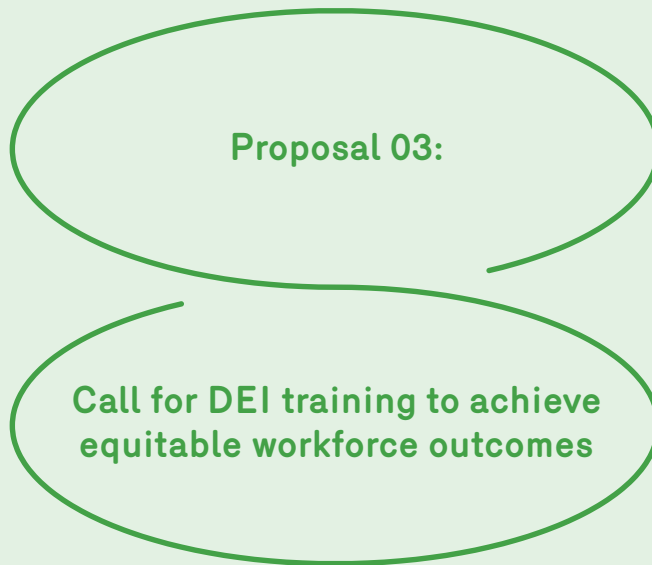
Outcomes

This initiative would expand the pool of energy efficiency skill holders, benefitting both trainees and small to midsize firms. Upskilling incumbent laborers leads to promotions, increased pay, or increased earnings through more work hours. Vacancies caused by upskilling existing tradespeople can be backfilled by entry-level and mid-level applicants.

Precedents

Existing models such as SBS Apprenticeship and Customized Training are starting points that could be evaluated for alignment with racial equity goals:

- The SBS Apprenticeship model currently exists for computer numerically controlled (CNC) machinists. It is an unregistered, 18-month program that pays \$15 an hour. While the basics of this model are good, improvements would shorten the program length to one year and pay a living wage. Utilizing this program model would require a relationship with existing clean energy companies.
- SBS Customized Training program is a reimbursement grant that is targeted towards the business owners and requires the training of at least 10 employees. Businesses pay for training costs up front and get reimbursed on a quarterly basis. Employees can take different trainings and have one year to complete training. Upon completion of training, businesses must provide wage increases and offer full-time employment (30+ hours) to the training participants.⁹⁷ Employees' ability to take different training is a major benefit of this model. The reimbursement component of this model may present a barrier for businesses with lower financial means. They will not be able to participate in this grant program without an established no-interest lender willing to lend them their operating expenses until the business receives the reimbursement.



Strategy

The City should develop standards for robust diversity, equity, and inclusion (DEI) outcomes from retrofit firms and workforce development organizations, programs, and trainings in the retrofit market and clean energy sector more broadly.

Historically, environmental movements have disproportionately increased opportunity for white people, on the backs and at the expense of women and Black, Indigenous, and people of color (BIPOC). A proactive movement to address and undo pervasive racial, gender, sexual orientation, and disability bias is needed. DEI knowledge gaps hinder efforts to expand equitable workforce and business development.

Businesses and workforce development organizations must lead with the moral imperative to close the racial wealth gap. The City and private sector should embed programmatic DEI work into approaches to workforce and business development in this sector. This DEI work can include internal assessment of work culture and environment; requisite training by a professional consultant; and action planning on organizational incorporation and re-framing. Long-term assessment

and monitoring is necessary to ensure accountability, track progress/regress of goals in hiring practices, retention of diverse talent, and revised business policies. New York City can build upon Executive Order 45, which charges City agencies with addressing disparities in their work, to issue clear standards and a strong call to action to the private sector.⁹⁸

Value

A City-led call to action for DEI would provide a pathway for firms, workforce and business development organizations/institutions, and private sector actors to realize equitable business and workforce outcomes in the energy efficiency sector and beyond. DEI assessment of firms can identify explicit and implicit bias including sexual orientation discriminatory practices, cultures of white supremacy, and structural barriers that prevent equitable access to opportunity. Workshops may help reveal areas of issue when given the appropriate length of time to process arising emotions and safe interventions in cases of conflict.

Outcomes

Effective DEI assessment can lead to the

reframing of the organizational ethos, including the Mission, Vision, and the Strategic Plan. New guidance documents, including diversity statements, media outreach on DEI pathways, and other disclosures on DEI commitments may also follow. Among common outcomes, human resource departments improve job descriptions (flagging gender or racial bias), outreach and recruitment techniques, interviews protocols, and hiring. For larger firms, executive-level DEI management like Chief Equity Officers, who can continue to monitor progress (or lack thereof), shape direction, give feedback, and dedicate focused attention to the effort, may be possible.

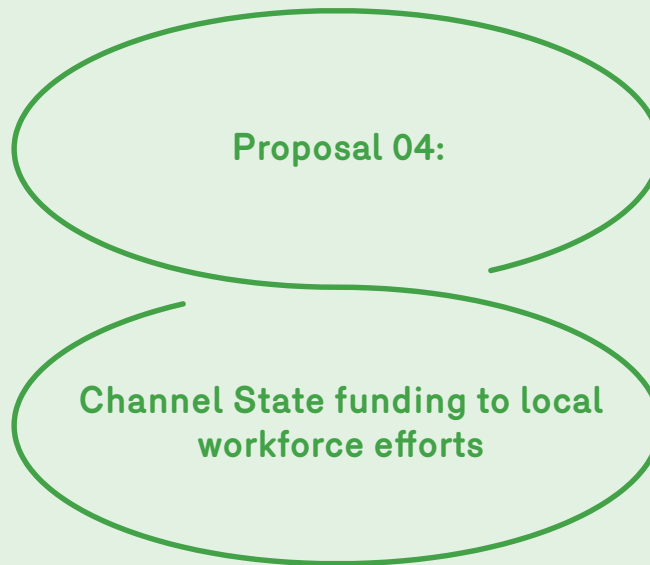
Precedents

Widespread efforts to address DEI in municipal governments and climate organizations provide relevant precedents:

- Workforce development-specific racial equity resources like Race Forward's Racial Equity Readiness Assessment for Workforce Development provide an essential reference point.⁹⁹
- Precedent for citywide efforts to realize racial equity exists in cities like Seattle, which has committed to ending institutionalized racism in City government, promoting inclusion and full participation of all residents in civic life, and partnering with communities to end racial bias through its Race and Social Justice Initiative.¹⁰⁰
- Local governments including the cities of Seattle, Providence, San Antonio, Madison, and Portland are using online resources for DEI guidance, such as the racial equity toolkits developed by Government Alliance on Race and Equity (GARE),¹⁰¹ Urban Sustainability Directors Network (USDN),¹⁰² and Living Cities.¹⁰³
- Many climate organizations, such as

Earthjustice and the Environmental Defense Fund, are setting up Diversity and Inclusion Workgroups, hiring wellness and restorative justice facilitators, and hiring other justice, equity, diversity, and inclusion (JEDI) senior-level, decision-making positions.

- Organizations such as the Natural Resources Defense Council (NRDC) are firming up their policies on MWBE vendor contracting, and using guidance like Intentionalist.¹⁰⁴



Strategy

The City should use an equity and racial justice lens to strategically connect local workforce players with State funding opportunities connected to the CLCPA.

The State’s CLCPA mandated that agencies invest 35% — with a goal of 40% — of clean energy program resources to benefit disadvantaged and environmental justice communities, criteria for which will be set by the State’s Climate Justice Working Group.¹⁰⁵ While this mandate is still in the early stages of implementation and compliance,¹⁰⁶ the City has an opportunity to advocate for statewide funding from the CLCPA, as well as any other available sources, to equitably reach local workforce development organizations and their networks of workers, building owners, unions and trades, and research institutions to achieve environmental justice goals.

Workforce opportunities for BIPOC disadvantaged communities and other segments of the population that may be underrepresented in the clean energy workforce such as veterans, women and formerly incarcerated persons must be prioritized. This approach requires cultivating

relationships between key climate justice organizations, green and sustainability workforce development programs, industry leaders, and City and State agencies. Local organizations must be able to access funds to effectively train, place, and support a new generation of clean energy workers.

Value

New York City’s workforce development efforts will have the greatest impact in communities of color and environmental justice communities if the City directly links statewide funding opportunities to local groups. This funding can help equip local groups to effectively train and work with community residents in an equitable, holistic, and effective manner.

Outcomes

This approach will build direct access to funding opportunities and strategic partnerships to actively strengthen New York City’s energy efficiency retrofit workforce. Ultimately, this funding will help the City meet CMA goals and objectives. Strategic funding partnerships will be catalytic in ensuring New York City’s workers are connected

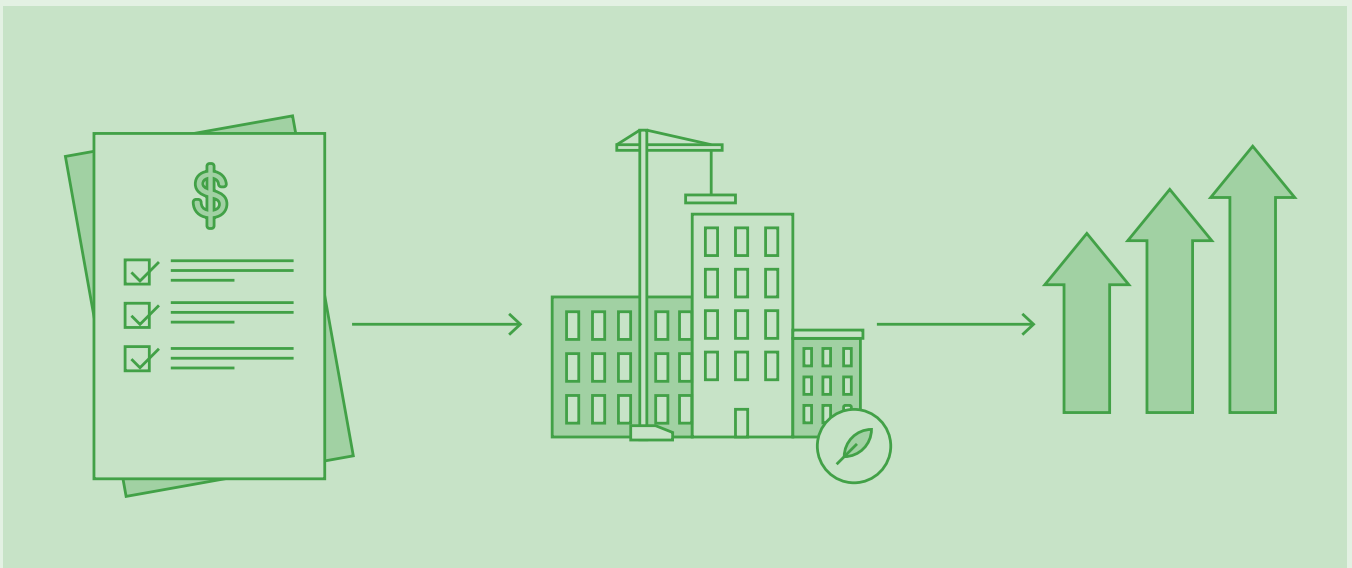
to pivot points, upskills, and supportive career trajectories in the steadily growing clean energy industry, including the retrofit sector.¹⁰⁷

Precedents

Several recent programs indicate that there is a commitment to green job workforce growth at the State level:

- The Public Service Commission recently approved a \$573 million expansion of the NY-Sun Program, of which \$200 million is projected to help activities focused on low- and moderate-income New Yorkers.¹⁰⁸
- The State also recently announced an \$8.5 million investment to support NYSERDA's Career Pathway Training Partnerships program in high efficiency heating, ventilation and air conditioning, and electric heat pump technologies.¹⁰⁹

Catalyzing Innovation



Problem

While businesses owned and run by minorities and women have been at the forefront of innovation, historically, these businesses are rarely recognized for or capture the value from their impact.¹¹⁰ Furthermore, the traditional spaces and tools for bringing innovative ideas to market — including access to capital, political support and publicly sponsored programs — are often not available to MWBEs. This creates a two-fold dilemma: First, MWBEs are unable to ascend to their full potential. Second, the economy and research fields miss out on the knowledge base intrinsic to MWBEs.

In the retrofit market, these historical trends position MWBEs pursuing new opportunities, technologies, and business models at the intersection of several interrelated challenges. Limited access to capital; lack of diversity, inclusion, and equity practices in existing business development programs specific to the retrofit market; decentralized information and partnership opportunities; and policy constraints to implementing new retrofit models pose barriers for MWBEs navigating this emerging market.

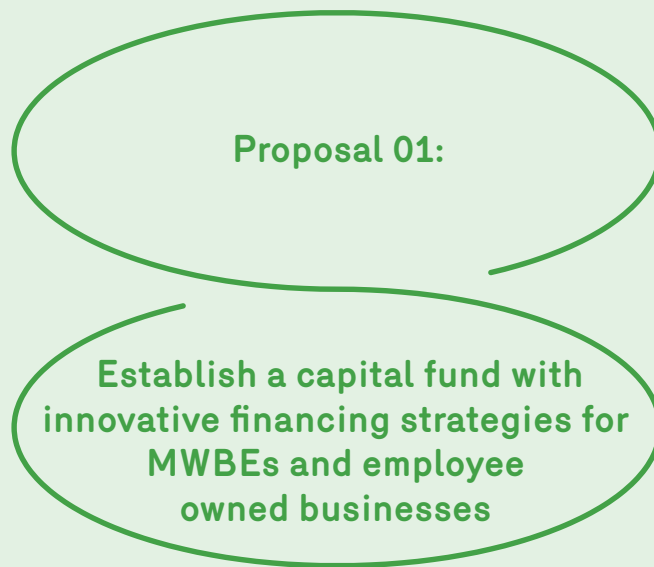
Focused and sustained efforts to address key issues that impact the long-term sustainability of MWBEs in the energy efficiency space remain absent from the incubation landscape, particularly among incubators and accelerators. The business innovation landscape is not adequately supporting entrepreneurs of color.

Strategy

The failures of the current innovation ecosystem to serve MWBEs call for reframing “innovation.” In the following proposals, innovation is defined as the introduction of new methods for inclusive business development. It is a transformation of the

financial and programmatic strategies used to promote green infrastructure and support MWBEs.

Rather than siloed solutions, a comprehensive, multi-pronged approach that enables MWBEs to network, share skills, and access resources will have the greatest impact towards inclusive business development. Direct recruiting of MWBE firms is not helpful when those firms do not have enough capital to compete for a project. Private contractors alone cannot be expected to navigate the challenges to implementation posed by existing building code and zoning constraints. The proposals below account for existing challenges, and call for the development of needed public/private models that invest in research and development for inclusive business development. They pose ideas for collective think tanks and incubation spaces that put MWBEs at the forefront of developing innovative technologies and implementation models. They call for greater transparency in policies that govern MWBE certification and zoning and building constraints. In sum, they invest in MWBEs to lead the way in the emerging retrofit market.



Strategy

The City should seed a venture or early growth capital fund offering less extractive financing strategies exclusively to MWBEs and employee owned businesses operating in fields across the climate action spectrum, including energy efficiency retrofits.

MWBEs face disproportionate challenges in accessing capital to launch their businesses. In their current state, venture capital models are not serving MWBEs. Rates of investment in minority-owned, and particularly Black-owned, businesses are painfully low, despite their performance.¹¹¹ Thus, the costs of moving into emerging markets becomes prohibitively high, and MWBEs may be shut out of another new market after “first mover advantage” takes hold.

An investment fund would allow targeted firms to seize a larger share of the burgeoning market for retrofits by de-risking new business formation or entrance into new markets, driving businesses to a scale that matches that of the challenge, and elevating minority- and employee owned firms as leaders in the space. Target firms would include both newly founded and small firms looking to

grow or enter a new field. The fund should be uniquely structured to build economic democracy in relationships with both investors and supported businesses.

To break down the barriers created by a lack of access to generational wealth, flawed perceptions of risk, and prohibitive expectations for growth, the fund should pursue unique investment structures that blend aspects of debt capital, which is highly risk-averse from the perspective of the lender, and venture capital, which demands massive growth potential from the business. Models to explore include revenue-based financing, revenue sharing and shared earnings agreements, and royalties payment from product development.¹¹² The fund would be seeded with capital from NYCEDC that is currently oriented around either top-down economic development that lacks an equity lens (such as life sciences venture investments) or equity-focused efforts that could benefit from an explicit connection to climate action (such as WE Venture¹¹³). This initial investment would leverage additional capital from philanthropy, nonprofit financial institutions and potentially private sector partners. The City would partner with one or more Minority Depository Institutions (MDIs) and/or Community Development

Financial Institutions (CDFIs) to manage and control the fund.

The fund would give communities a voice in investment decisions by giving community-based organizations — particularly those providing business support services — seats on the investment committee. The public could also invest either in the fund or in individual businesses through crowdfunding.

Value

This intervention positions minority- and employee owned firms to seize a greater share of the retrofit market by somewhat de-risking the leap into a nascent field, driving businesses to a scale that meets the scale of the opportunity, and elevating the profile of firms as leaders in the space. It counteracts the inherent advantages of established firms and new white-owned firms that rely on generational wealth. It creates values on multiple levels including development of new technologies and processes to meet climate goals quickly and cheaply, building wealth for firms, increasing capacity of more equitable lenders, and direct financial return on City investment.

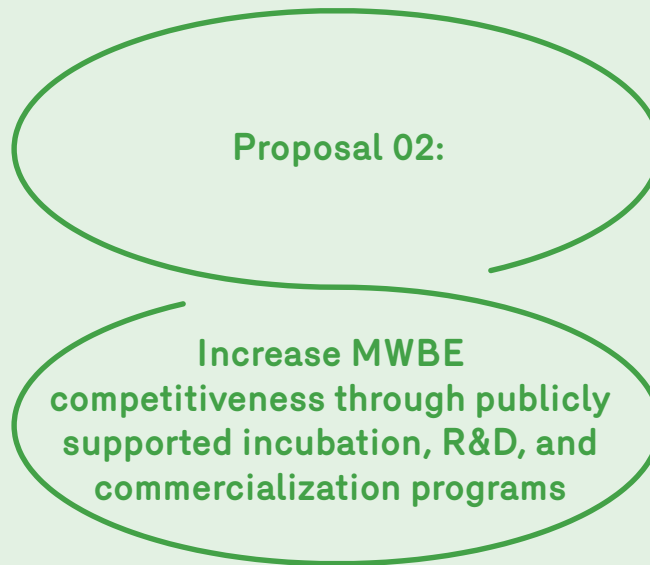
Outcomes

This fund will ultimately enable a large group of well capitalized minority- and employee owned firms active in developing and implementing climate solutions. By creating a high profile for the funding opportunity, the fund can create a market perception of these firms as leading the way or being the “go to” in the field. The fund will also promote the creation of new and innovative solutions and strategies to achieve climate goals.

Precedents

While several viable models exist for various aspects of the proposed fund, no one model brings together minority- and employee owned firms focused on retrofits, clean energy, and other climate solutions; public-private investor partnerships; and investment models that build economic democracy. Models include:

- WE Fund, led by SBS, supports women entrepreneurs in accessing capital. WE Fund offers precedent for the City of New York operating as a mission-focused venture investor alongside other partners and for community involvement in investments.¹¹⁴ WE Fund Crowd offers precedent for bridging City funding with crowdfunding.¹¹⁵
- The Engine is an Massachusetts Institute of Technology-led venture capital fund, offering precedent for a climate-focused fund and the involvement of university partners.¹¹⁶
- Harlem Capital is one New York-based example among many other examples of funds focused on minority founders.¹¹⁷
- Alternative Capital is an alternative to venture funding that has the risk tolerance of venture capital without the demands for massive growth.¹¹⁸



Strategy

As an alternative to traditional incubators, the City should build a public-private-nonprofit partnership to provide standard innovation support as well as access to R&D and technology commercialization opportunities.

A City-led partnership should bring together public and private stakeholders to support pre-startup, startup, and emerging MWBEs. The partnership should provide normative incubation support such as access to capital, mentorship, networks, joint venture opportunities, and concierge business development and growth resources. This partnership should also provide explicit and robust R&D support for MWBEs interested in pivoting or expanding core business or product offerings. The emergent nature of the retrofit market and its evolving technologies, such as high performance building façades, afford fruitful opportunities to connect R&D to business growth. Where appropriate, this partnership should also provide opportunities and mechanisms for MWBEs to benefit from and lead the commercialization of retrofit specific technologies — that is, for MWBEs to enact market transfer of leading technologies or products coming out of R&D.

Diverse stakeholders — including real estate owners/developers, financial institutions, impact investors, community groups, existing MWBEs in the retrofit space, academic institutions, and existing incubators and accelerators, retrofit tech/product manufacturers — should convene to identify specific missing links and knowledge gaps that the partnership could address as well as opportunities for strategic business partnerships that the initiative could facilitate.

Value

A formalized structure for identifying and building partnerships, with explicit goals to support inclusion and diversity, can provide better support for the creation and sustainability of MWBEs than they are receiving from the current incubator system. By creating a link between innovation and implementation, this intervention will allow MWBEs to capture market share while mitigating first mover advantages of existing firms in the retrofit space.

For private sector stakeholders, participation in this partnership can help them access trusted services from MWBEs they may not otherwise have relationships with. It can also advance their internal diversity, equity, and inclusion efforts.

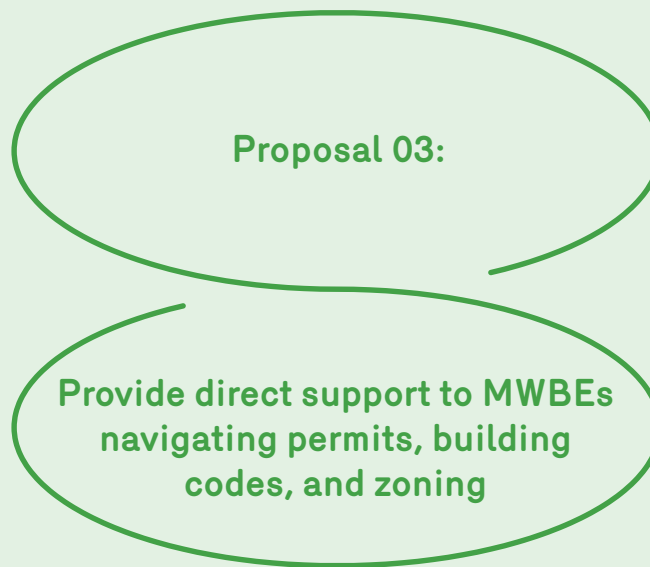
Outcomes

This intervention will help to identify and seed valuable partnerships by bringing together stakeholders who would not usually convene. While the exact outcomes of R&D pipelines and commercialization opportunities will be driven by needs and opportunities identified by partners themselves, the ultimate goal of this intervention is to achieve increased MWBE market share in the retrofit space and increased connections between MWBEs and emerging innovations.

Precedents

There are many incubator and accelerator programs across the country and internationally, including some targeted specifically at minority-owned businesses.¹¹⁹ In New York City, the Minority & Women Contractors & Developers Association is working to create an incubator program that will support MWBE contractors with services including financing and back-office support.¹²⁰

However, this approach is modeled more closely off of partnership-based efforts like Tecnalia, a leading research and technological development center in Europe that utilizes public and private resources to provide solutions to markets and the private sector through inclusive business development that enables the public to retain and capture value from its investment.¹²¹



Strategy

The City should provide MWBEs with robust, targeted guidance for navigating permits, building codes, and zoning regulations related to building retrofits.

Policy and regulatory constraints pose barriers to the implementation of new retrofit models and result in difficult-to-navigate zoning, code, and permit issues. It can be a daunting process to comply with every permit — particularly when undertaking new work, such as retrofits — due to the know-how required to successfully navigate City bureaucracy.¹²²

The New York City Department of City Planning (DCP) and Department of Buildings (DOB) could form a joint initiative to help MWBEs and other small businesses to better navigate City policies, codes, and permits pertaining to retrofits. These agencies could coordinate to design a hotline, app, or website for MWBEs to gather information on zoning, building codes, and necessary permits. Ideally, the digital interface would be supported by a small staff with capacity to field individualized requests in a timeline manner. This initiative could be housed within City agencies or in a third party.

Value

Through clear access to information on zoning, codes, and permits, at low cost to the City, MWBEs would be able to transition more efficiently into the new retrofit sector. Small non-MWBE firms could also benefit from this resource, helping to catalyze the retrofit market at large. By increasing MWBE access to City agencies and expediting the flow of information and transparency, the City may find their permit processing more efficient for MWBEs that require clarification on a permit request.

Outcomes

This strategy would allow MWBEs to access City departments that can be difficult to navigate, to understand the latest zoning codes, and to learn about the latest building codes. This, in turn, could send a message to larger developers that MWBEs have a quicker response time to deliver a project and to execute changes in a building.

Precedents

This proposal builds on OpenGov models, which exist for everything ranging from community grants to special event permitting to cannabis regulations.

Abbreviations

BE-Ex: Building Energy Exchange	R&D: Research & Development
BIPOC: Black, Indigenous, and People of Color	SBA: U.S. Small Business Administration
CDFI: Community Development Financial Institution	SBS: New York City Department of Small Business Services
CLCPA: Climate Leadership and Community Protection Act	USDN: Urban Sustainability Directors Network
CMA: Climate Mobilization Act	WCBDI: Worker Cooperative Business Development Initiative
CNC: Computer Numerically Controlled	
ConEd: Con Edison	
CSI: Center for Social Innovation	
CUNY: City University of New York	
DCP: New York City Department of City Planning	
DEI: Diversity, Equity, and Inclusion	
DOB: New York City Department of Buildings	
EPA: Environmental Protection Agency	
ERV: Energy Recovery Ventilator	
HVAC: Heating, ventilation, and air conditioning	
JEDI: Justice, Equity, Diversity, and Inclusion	
GARE: Government Alliance on Race and Equity	
MDI: Minority Depository Institution	
MWBE: Minority- and women-owned business	
MWCDA: Minority & Women Contractors & Developers Association	
NEW: Nontraditional Employment for Women	
NRDC: Natural Resources Defense Council	
NRTA: NYCHA Resident Training Academy	
NYCEDC: New York City Economic Development Corporation	
NYCHA: New York City Housing Authority	
NYCIDA: New York City Industrial Development Agency	
NYC WKDEV: Mayor's Office of Workforce Development	
NYSERDA: New York State Energy Research and Development Authority	
P2A: Pathways 2 Apprenticeships	

Notes

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