Building a Workforce Infrastructure for the Green Transition: Recommendations from the Green Economy Network

In 2022, the Green Economy Network (GEN) advanced a set of workforce recommendations to strengthen New York City's approach to building an inclusive green economy. Several of these proposals directly informed the city's Green Economy Action Plan, helping shape the framework for aligning climate investment with workforce opportunity.

As New York City and New York State continue to advance climate resilience and sustainability initiatives, the next phase of implementation will require stronger alignment across workforce systems, education pipelines, and major public investments. Building an inclusive green economy depends on understanding the knowledge and skills required to deliver climate and sustainability priorities, while simultaneously developing durable pathways to good jobs.

The new mayoral administration presents an opportunity to further align data, policy, and practice across workforce, education, and economic development systems so that climate investment translates into long-term career opportunities.

OUR VISION

A just and sustainable economy in which quality green jobs are accessible to everyone

What is the Green Economy Network?

GEN is a coordinated, cross-sector partnership bringing together workforce organizations, postsecondary institutions, employers, public agencies, and philanthropy to build a strong green economy—one that creates good jobs, expands economic mobility, and improves quality of life through investments in buildings, transportation, and infrastructure.

The network brings together hundreds of nonprofits, public agencies, and employers to assess the green economy, strengthen understanding of challenges and opportunities in the sector, connect workforce organizations with employers, and support progress toward decarbonization goals. The network is committed to:

- Building and strengthening employer partnerships to define hiring needs, inform training, and align partners across the ecosystem.
- Establishing clear, scalable pathways for jobseekers to enter and advance in green economy careers.
- Advancing public investment strategies that support clean energy workforce development at scale.

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Our Recommendations for Mayor Mamdani

1. **Establish a centralized Workforce Authority with enforcement power:** Create a Workforce Authority within City Hall to set citywide standards and align procurement[1] across 21 relevant agencies to ensure high-quality career outcomes. This Workforce Authority will move beyond parallel programming by integrating local hiring mandates and wage benchmarks directly into climate-related contracts, while requiring mandatory reporting on long-term retention and job quality.
2. **Launch the 500-school retrofit pilot:** Scale a major infrastructure initiative to retrofit 500 public schools, generating thousands of jobs and creating structured training pipelines for students and local residents. These schools will function as "living labs" where building systems like heat pumps and solar arrays serve as hands-on learning tools, supported by direct-entry agreements with building trades and tiered training programs for both youth and adult learners.
3. **Implement a sustainable financing framework for the clean energy workforce pipeline:** To avoid new tax-levy spending, the city should classify workforce delivery costs—such as recruitment and screening—as project management soft costs within capital budgets, allowing them to be financed through long-term infrastructure bonds. This sustainable model should be further bolstered by capturing Local Law 97 noncompliance penalties and aligning city projects with state and federal incentives, including NYPA clean energy funds and the New York State Sustainable Futures funding, to offset the costs of a robust clean energy talent pipeline.

Establish a Workforce Authority with Enforcement Power

New York City should create a Workforce Authority housed in City Hall to coordinate workforce strategy across relevant agencies and embed workforce standards into major public investments. Reporting to a deputy mayor, the authority would serve as the city's central owner of workforce outcomes, aligning policy, procurement, and implementation across agencies. The Workforce Authority would function as the operating system through which agencies are managed and made interoperable. Its role would be not to deliver programs but to ensure consistent standards, agency alignment, and the enforcement of workforce outcomes.

Core Functions

Citywide Workforce Standards

The Workforce Authority would establish consistent standards for:

- Job quality and wage benchmarks
- Local hiring and recruitment expectations
- Employer engagement practices
- Retention and advancement metrics, including six- and twelve-month retention and wage progression

These standards would apply across workforce initiatives connected to city-funded projects, including clean energy implementation.

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[1] The call for a centralized Workforce Authority, or "czar," echoes similar calls from our peers, particularly Center for an Urban Future's *5 Ideas for How the Mamdani Administration Can Strengthen Workforce Development*, on which JobsFirst NYC partnered.

Procurement and Contract Alignment

The authority would ensure that workforce standards are embedded into procurement and capital delivery processes by:

- Aligning workforce language across agency RFPs and contracts
- Linking contractor performance to workforce outcomes such as retention and advancement
- Establishing enforcement mechanisms to prevent low-road contracting practices
- Requiring RFPs to include a dedicated capitalizable cost category for workforce delivery

Embedding workforce expectations directly into procurement would ensure that workforce goals are integrated into project delivery rather than treated as parallel programs. By classifying workforce delivery as a capitalizable cost category, the city would accord human infrastructure the same long-term valuation as physical assets, ensuring that the development of a skilled local workforce is recognized as a permanent investment in the city's economic resilience.

Community Hiring and Environmental Justice Priorities

Major projects should require partnerships with community-based organizations to allow access for communities most impacted by environmental and economic inequities.

The Workforce Authority would:

- Establish hiring priorities for environmental justice ZIP codes.
- Require community-based workforce organizations to serve as funded partners responsible for outreach, screening, training, placement, and retention support.
- Set minimum targets for local hires in entry-level and career-track roles.
- Require public reporting on hiring geography, wages, and retention outcomes.

Cross-Agency Coordination

Workforce initiatives in New York City currently span multiple systems without a central coordinating entity. At the time of this report, approximately 21 city agencies explicitly managed workforce development funding and programs. The Workforce Authority would align planning and implementation across key agencies, including:

- Department of Small Business Services
- New York City Public Schools
- City University of New York
- New York City Economic Development Corporation
- Mayor's Office of Climate and Environmental Justice

This coordination would ensure that education pipelines, training programs, and hiring opportunities are aligned with major capital and sector investments.

Demonstrate the Model Through the 500-School Retrofit Initiative

Mayor Mamdani's proposed 500-school retrofit offers a key opportunity to demonstrate how coordinated workforce governance can connect climate investment with career pathways. School retrofits sit at the intersection of climate policy, capital planning, procurement, and education systems, making them an ideal pilot for a coordinated workforce strategy. While the mayor's platform highlights the role of unions in delivering this work, a coordinated workforce approach would ensure that the learning, training, and career mobility pathways needed to connect New Yorkers into these jobs are intentionally built alongside the projects themselves.

A workforce-aligned retrofit initiative could generate 500 to 2,500 paid jobs and work-based learning placements, while building long-term pipelines into growing climate and infrastructure careers. With clear coordination across agencies, education systems, unions, and training providers, retrofit projects would serve not only as infrastructure upgrades but also as structured entry points into union apprenticeships and related career pathways.

Pilot retrofit schools could also function as "living labs," where building systems and climate technologies are designed to support hands-on learning for students and workforce trainees. These spaces could provide ongoing opportunities for observation, training, and workforce development tied directly to real infrastructure projects.

Strategic Vision: Infrastructure as a Career and Economic Mobility Engine

- **Impact:** A workforce-aligned retrofit initiative would generate 500 to 2,500 paid jobs and work-based learning placements.
- **Pipeline goal:** Beyond the immediate construction, this initiative would build long-term pipelines into growing infrastructure careers through structured entry points into union apprenticeships.
- **The "living lab" concept:** Pilot schools would function as living labs, with building systems (solar, heat pumps, etc.) designed for hands-on student observation and workforce trainee instruction.

Lead agency: Workforce Authority (in coordination with the New York City School Construction Authority, New York City Public Schools, and GEN)

The Three-Tiered Delivery Model

To maximize the utility of the "living lab" approach while ensuring school security and operational continuity, the initiative would differentiate learning opportunities by age group, timing, and funding source:

- **Tier 1: Integrated K–12 learning (foundational, delivered during in-school hours)**
    - **Focus:** General climate literacy and career awareness.
    - **Implementation:** Students monitor the school's heat pump efficiency and energy dashboards during science/STEM periods.
    - **Funding:** Standard public school curriculum and teacher professional development budgets, in conjunction with the rollout of New York State Personal Finance and Climate Change Education requirements.

- **Tier 2: Modern youth apprenticeships (advanced, delivered through a hybrid model)**

    - **Focus:** Paid, credit-bearing vocational training for high school juniors and seniors.
    - **Implementation:** Modeled on the Career Readiness and Modern Youth Apprenticeship. Students spend half-days on site with the retrofit contractor.
    - **Pathways:** Direct credit toward GPRO and OSHA-30 certification, along with clear pathways into union jobs.
- **Tier 3: Community workforce training (technical, delivered after hours and on weekends)**
    - **Focus:** Adult residents, career changers, and out-of-school youth.
    - **Implementation:** Utilizes school mechanical wings and shared equipment outside school hours, on weekends, or during summer sessions.
    - **Role of GEN:** Community-based organizations within GEN would serve as funded training providers, ensuring that the curriculum is aligned with the technical needs of the retrofit project.

Union Alignment and Direct Entry

To fulfill Mayor Mamdani's mandate for high-road labor standards, the Workforce Authority could formalize direct-entry agreements with the Building and Construction Trades Council. This would ensure that student and community pathways lead directly to union apprenticeships in the specific trades performing the school retrofits:

- **IBEW Local 3:** Training on school solar energy systems, electric vehicle (EV) charging, and load management.
- **UA Local 1** and **Local 368:** Training on school heat pumps and thermal energy networks.
- **NYC District Council of Carpenters:** Training on envelope weatherization and high-performance insulation.
- **Laborers' Local 79:** Training on general green construction and hazardous material abatement.

Operational Design and Standardized Pathways in Environmental Justice Communities

Every retrofit project in environmental justice communities could follow a mandatory, four-step workforce pipeline:

1. **Outreach:** Led by GEN workforce partners within the relevant ZIP codes.
2. **Screening:** Pre-employment training and technical vetting.
3. **Placement:** Direct placement into paid entry points (internships, pre-apprenticeships, and transitional roles) embedded in the retrofit contract.
4. **Retention:** Six to twelve months of career navigation and support services.

Shared Training Infrastructure and High-Need Areas

Because specialized equipment is often too costly for individual programs to maintain, the city could establish centralized training and resilience hubs within pilot schools. These hubs would focus on high-need sectors identified by the Green Economy Action Plan:

1. **Building efficiency and advanced HVAC**
2. **Electric vehicle charging infrastructure**
3. **Building automation and maintenance**.

Implement a Sustainable Financing Framework for the Green Workforce Pipeline

Given the city's projected budget shortfall, the retrofit initiative is designed to avoid new tax-levy spending by utilizing capitalized labor principles. By shifting workforce development from a social service expense to a project delivery investment, the city could fund these essential functions through its $6B+ annual capital budget and existing external revenue streams.

Workforce Soft Cost Capitalization

The city should classify community outreach, screening, and retention services as project management soft costs within capital budgets.

- **Mechanism:** Like architectural fees or site inspections, these workforce functions are essential to the successful delivery of the physical asset.
- **Impact:** This would allow workforce coordination to be financed through long-term infrastructure bonds rather than the operating budget, protecting the general fund during deficit cycles.

Procurement Alignment and Contractor Cost-Sharing

To ensure that workforce goals are integrated into project delivery rather than treated as parallel programs, the city should embed workforce expectations directly into the procurement process:

- **Requirement:** RFPs should require contractors to demonstrate funded partnerships with GEN member community-based organizations and workforce training providers for recruitment and retention.
- **Efficiency:** By embedding these costs into climate-related procurements, the city would leverage contractor budgets to deliver community outcomes as a core project requirement.

Inter-Agency Coordination and Administrative Efficiency

The Workforce Authority would serve as the central coordinating entity for aligning planning across 21 city agencies involved in workforce development:

- **Mechanism:** This coordination would help ensure that education pipelines and training programs are synced with the city's $6B+ annual capital spend.
- **Impact:** By reducing redundancy and administrative waste across agencies, the city would optimize its current budget and ensure that existing training dollars are directed toward projects with guaranteed capital funding.

Alternative Revenue and External Alignment

The retrofit initiative could further offset costs by tapping into dedicated green economy funding:

- **Local Law 97 penalties:** A portion of Local Law 97 noncompliance penalties could be directed to support training infrastructure and "living lab" retrofits. Additional Department of Buildings noncompliance penalty funding streams include Local Laws 84, 133, 87, 88, 33, and 95.

- **State and federal funding alignment:** City project requirements could be aligned with New York State climate funding and federal green energy incentives, including:
    - New York Power Authority's $12M for EV maintenance and clean energy career training
    - New York State's $1B Sustainable Futures funding for renewables, building decarbonization, thermal energy, and clean transportation.
- **Public-private partnerships:** The city could draw on GEN to help manage and support shared training infrastructure, allowing the cost of specialized equipment to be shared with industry partners and workforce providers.

Call to Action

The Green Economy Network at JobsFirst NYC provides this roadmap as a concrete strategy to turn NYC's green transition into an engine for economic mobility. These recommendations feature the data-driven infrastructure and specific funding strategies to ensure this vision becomes a reality even in a challenging budget climate.

The proving ground is ready, the network is aligned, and the mandate is clear. It is time to move beyond siloes and establish the centralized authority New Yorkers deserve.

We invite you to sign on to support these recommendations and collaborate with the Green Economy Network to help implement these governance and financing models.

To learn more contact **Malia Darby** at mdarby@jobsfirstnyc.org.

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