



THE CITY OF NEW YORK  
OFFICE OF THE MAYOR  
NEW YORK, N. Y. 10007

EXECUTIVE ORDER NO. 23

September 22, 2022

CLEAN CONSTRUCTION

WHEREAS, the City of New York has a moral, economic, public health, and security imperative to act to protect our planet, fellow human beings, and future generations; and

WHEREAS, the reduction of pollution in the City of New York is necessary to protect the health and safety of the City's residents; and

WHEREAS, climate action taken by cities in the United States and around the world can result in 40% of the pollution reduction needed globally to limit warming to only 1.5 degrees Celsius; and

WHEREAS, the many benefits of climate action by cities also address issues of inequality, including the expanding wealth gap, the lack of housing, the disparate access to public transit, aging infrastructure, and other major urban challenges; and

WHEREAS, the City of New York is committed to carbon neutrality by 2050 and the goals set forth in the Paris Agreement; and

WHEREAS, construction is responsible for 23% of global greenhouse gas emissions; and

WHEREAS, the embodied carbon from cement manufacturing is responsible for an estimated 8% of global greenhouse gas emissions; and

WHEREAS, the embodied carbon from iron and steel production accounts for approximately 7% of global greenhouse gas emissions; and

WHEREAS, construction equipment burning fossil fuels emits pollutants such as carbon dioxide, nitrogen oxides, carbon monoxide, and particulate matter (PM 2.5 and PM 10), and endangers people's health and surrounding environment; and

WHEREAS, construction equipment also contributes to noise pollution which affects construction workers and neighborhood residents; and

WHEREAS, Chapter 18 of the City Environmental Quality Review (CEQR) Technical Manual, entitled ““Greenhouse Gas Emissions and Climate Change,” recommends reducing the carbon intensity of building materials; and

WHEREAS, the City of New York commits to reducing greenhouse gas emissions associated with the embodied carbon of building materials and construction equipment through city agency leadership as set forth in this Order; and

WHEREAS, the City of New York has the opportunity to lead the market development and uptake of low-embodied carbon and clean construction strategies through the incorporation of these principles into our publicly-funded projects;

NOW, THEREFORE, by virtue of the power vested in me as Mayor of the City of New York, it is hereby ordered:

Section 1. Definitions. For the purposes of this Order:

“Capital project agencies” means the department of design and construction, department of citywide administrative services, department of environmental protection, department of transportation, and department of parks and recreation.

“Embodied carbon” means the greenhouse gas emissions arising from the manufacturing, transportation, installation, maintenance, and disposal of building materials.

“Environmental Product Declaration (EPD)” means a third-party-verified International Organization for Standardization (ISO) Series 14025 Type III declaration that quantifies environmental information on the life cycle of a product to enable comparisons between products fulfilling the same function.

“Green building standards” has the same meaning as such term is defined in subdivision a of section 224.1 of the charter of the city of New York.

“Life cycle assessment (LCA)” means a systematic set of procedures for compiling and examining the inputs, outputs and associated environmental impacts of a product or service system throughout its life cycle.

“Life cycle assessment report” means a report that complies with one of the following green building standard credits, or equivalent, consistent with the standard pursued by the project:

- LEED v4 Materials and Resources Credit - Building Life Cycle Impact Reduction: Option 4. Whole-Building Life-Cycle Assessment;
- Envision v3 Credit CR1.1 - Reduce Net Embodied Carbon, and/or LD3.3 - Conduct Life Cycle Economic Evaluation; or
- NYC Green Schools Guide 2019 credit M3.1A – Life-Cycle Impact Reduction, Whole Building LCA.

“Substantial reconstruction” has the same meaning as such term is defined in subdivision a of section 224.1 of the charter of the city of New York.

“Substantial work on the building envelope” means the replacement or alteration of 50 percent or more of the building envelope’s total glazing area, or 50 percent or more of the building envelope’s total area of opaque components. This includes recladding, work on the interior side of exterior walls, including, but not limited to the removal of interior wallboard or plaster, and roof replacements.

§ 2. Low-carbon concrete specifications. Capital project agencies shall make their best efforts to incorporate low-carbon concrete specifications for all batch plant ready-mixed concrete used in capital projects and for concrete sidewalks, where such agency determines that such specifications are practicable and not preempted by State or Federal requirements. Such agencies shall, to the extent practicable, follow guidance from the Mayor’s office of climate and environmental justice (“Office”) for these specifications.

§ 3. Environmental product declarations. Capital project agency construction managers shall submit environmental product declarations (EPDs) to the Building Transparency database, a publicly available database of EPDs, using the OpenEPD format, as set forth below:

- a. Projects using concrete shall provide a product-specific EPD for all batch plant ready-mixed and precast concrete;
- b. Projects using steel shall provide a product-specific EPD for structural steel delivered to the jobsite.

The Office will provide guidance to agencies submitting EPDs to the Building Transparency database. To the extent practicable, such agencies shall also submit EPDs for such project to any database that the Office determines to be comparable and in wide usage.

§ 4. Low-emission vehicles and equipment. Capital project agencies shall make their best efforts to include specifications in capital project construction contracts for low-emission vehicles and equipment with a preference for all-electric equipment. Such agencies may also consider, among other resources, the Department of Citywide Administrative Services bi-annual publication of the Clean Fleet Transition Plan to determine the availability of low-emission equipment.

§ 5. Life cycle assessments. Capital project agencies shall endeavor to achieve, to the extent practicable, credits related to life cycle assessments (LCA) for capital projects that are required to comply with the green building standards and, where applicable, shall annually submit an LCA report to the office of environmental coordination. This section applies to new construction, additions, and substantial reconstructions with substantial work on the building envelope.

§ 6. Action plans. In accordance with guidance from the Office, capital project agencies shall develop and submit action plans aimed at reducing embodied carbon in capital projects to the Office by October 1, 2023. Such agencies are encouraged to develop joint action plans.

The Office will incorporate milestones into the City's long-term strategic sustainability plan.

§ 7. This Order shall take effect immediately.

Handwritten signature of Eric Adams in cursive script.

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Eric Adams  
Mayor