



NYC Capital Green Building Program

Local Laws 31 and 32 of 2016 Overview

Mayor's Office of Environmental Coordination

Established Precedent and Jurisdiction

- Executive Order 97 authorized the Office to exercise the powers and duties of the Mayor in conjunction with the implementation of LL86 (now LL31 and LL32).
- Executive Order 149 added to the Director's responsibilities the duties to periodically evaluate the stringency of the law's minimum requirements and, if warranted by developments affecting the green building industry, to change them as well as to expand the category of projects subject to the law's goals and polices.
- Accordingly, the Office is evaluating these requirements and their applicability while continuing to develop resources related to the law's ongoing implementation.

NYC Green Building Policies

Taking Sustainable Action

2005¹

LL86: Green building design standards for city capital projects.

2009²

LL84: Benchmarking of building energy and water use metrics.

LL85: Requires buildings to meet the most current energy code for renovations or alterations

LL87: Requires large buildings to audit, retro-commission, and submit information to the City.

LL88: Requires buildings to upgrade lighting to meet current New York City Energy Conservation Code standards by 2025.

2016¹

LL31: Requires city-funded capital projects for City-owned property to be built to consume less energy than buildings built under current standards.

LL32: Building off LL86 of 2005, requires more stringent green building design standards for city-funded capital projects.

2019³

LL92/94: Requires that the roofs of certain buildings be partially covered in green roof or solar photovoltaic electricity generating systems

LL95: Amends the NYC administrative code to establish more stringent building energy efficiency grades.

LL96: Establishes PACE, a financing program to fund qualifying energy efficiency and renewable energy projects to help comply with the Climate Mobilization Act

LL97: Required medium and large sized buildings to reduce their greenhouse gas emissions 40% by the year 2030, and 80% by 2050.

¹ NYC Capital Green Building Program

² Greater, Green Buildings Plan

³ Climate Mobilization Act

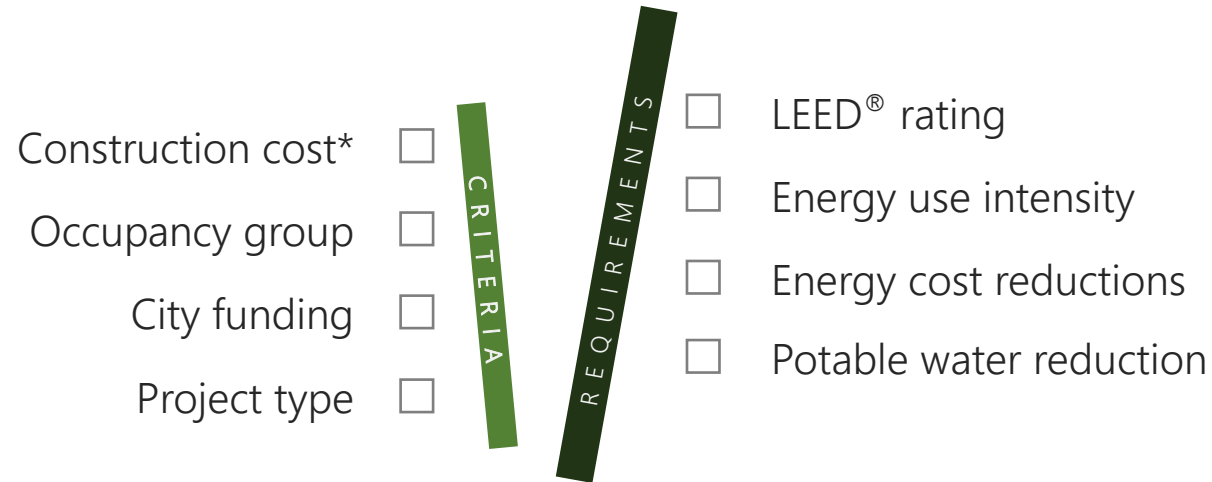
Legislation and Codification

Local Laws and Charter Revision

- Local Law 31 requires city-owned capital projects to be built to consume less energy than buildings built under current standards.
- Local Law 32 largely revises Local Law 86 of 2005, requires more stringent LEED® design standards for city-funded and city-owned capital projects and energy cost reductions .
- Charter Section 224.1 is labeled, “Green Building Standards”, and codifies these laws within the City’s Charter and Administrative Code.

Reaching Compliance

Criteria and Requirements



*Set to inflation (2007)

Reaching Compliance

LEED Rating

- Projects with an estimated construction cost of (\$2,500,000) or more involving the construction of a new building, an addition to an existing building, or the substantial reconstruction of an existing building, across most occupancy groups, are required to be designed and constructed to achieve a LEED® gold or higher rating.
- Specific occupancy groups (F, H, E, I2) have different designated standards, and some are exempt (A5, U).
- Substantial reconstruction: a capital project in which (i) the scope of work includes rehabilitation work in at least two of the following three major systems of the building: electrical, HVAC (heating, ventilating and air conditioning) and plumbing, and (ii) construction work affects at least 50 percent of the building's floor area.

Reaching Compliance

Energy Use Intensity

- Construction of a new building, an addition to an existing building, or the substantial reconstruction of an existing building that involves substantial work on the building envelope, across most occupancy groups, are required to be designed as a low energy intensity building. Specific occupancy groups are exempt (F, H, A5, U). A low energy intensity building is one designed and constructed such that its energy use intensity is the less stringent the following:
 1. 50 percent of the energy intensity of the more stringent of (a) the median source energy use intensity for buildings designed and constructed for similar uses according to benchmarking data obtained under article 309 of title 28, or (b) standards established for similar buildings according to ASHRAE 90.1-2013.
 2. A source energy use intensity of 38 kBTU/yr per square foot of floor area and for additions to, or substantial reconstructions of, existing buildings, a source energy use intensity of 42 kBTU/yr per square foot of floor area.

Reaching Compliance

Energy Cost Reductions

- Non-city owned projects with an estimated budget of (\$15,000,000) or more are required to be designed and constructed to reduce energy costs to by 20 percent
- Non-city owned projects with an estimated budget of (\$38,000,000) or more are required to be designed and constructed to reduce energy costs to by 25 percent.
- In addition, for either group, further investment in energy efficiency to reduce energy cost by an additional five percent is required if it is found that the payback on such investment through savings in energy cost would not exceed seven years.
- Specific occupancy groups (F, H) have different designated standards, and some occupancy groups are exempt (A-5, E, R, U).

Reaching Compliance

System Upgrades

- Capital projects not subject to LEED®, energy use intensity, or cost reduction standards, that are solely involve or include a system upgrade, are subject to specific requirements, dependent upon the type of project and the estimated construction cost for the installation.

<u>Installation</u>	<u>Cost</u>	<u>Reduction</u>
Boiler*	(\$2,500,000) or more	10 percent
Lighting	(\$1,300,000) or more	10 percent
HVAC	(\$2,500,000) or more	5 percent

*Provided that compliance with this would not be required for capital projects that would be subject to this paragraph solely because such project involves replacement of a boiler, unless the cost of such project equals or exceeds 50 percent of the cost of replacing the heating distribution system of such building.

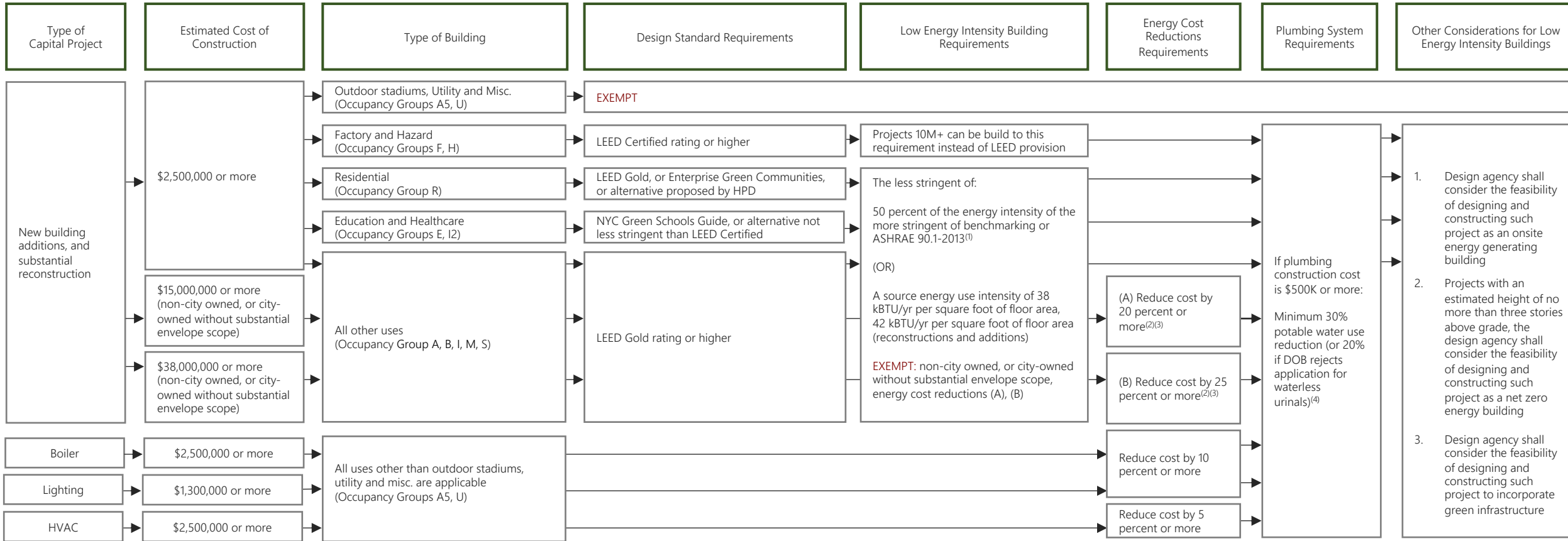
Reaching Compliance

Plumbing

- Each project involving the installation or replacement of plumbing systems that includes the installation or replacement of plumbing fixtures at an estimated construction cost for such of (\$630,000) or more must be designed and constructed to reduce potable water consumption in the aggregate by a minimum of 30 percent, as determined by a methodology not less stringent than that prescribed in LEED water efficiency: indoor water use reduction credit
- That percentage shall be reduced to a minimum of 20 percent if the department of buildings rejects an application for the use of waterless urinals for the project.

Criteria and Requirements Map

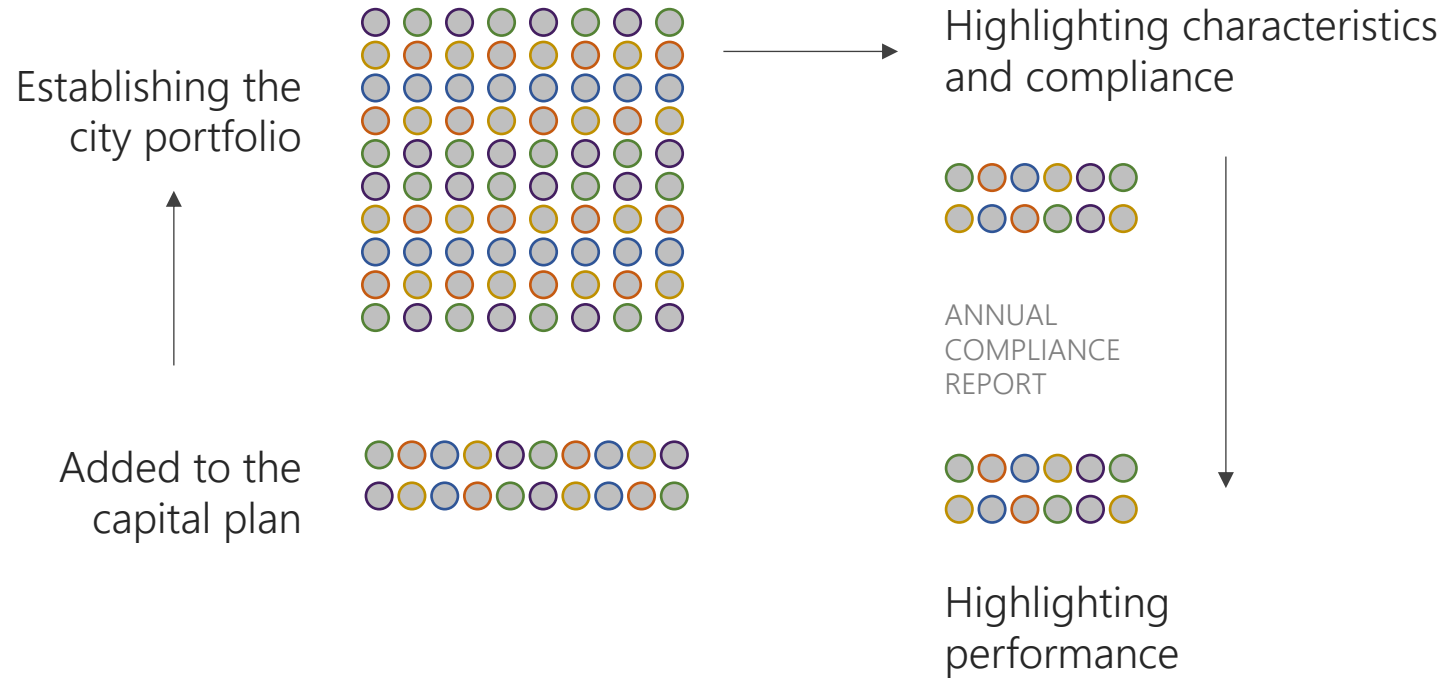
Reference Charter Section 224.1



SYSTEM INSTALLATION OR REPLACEMENTS

Components of Reporting

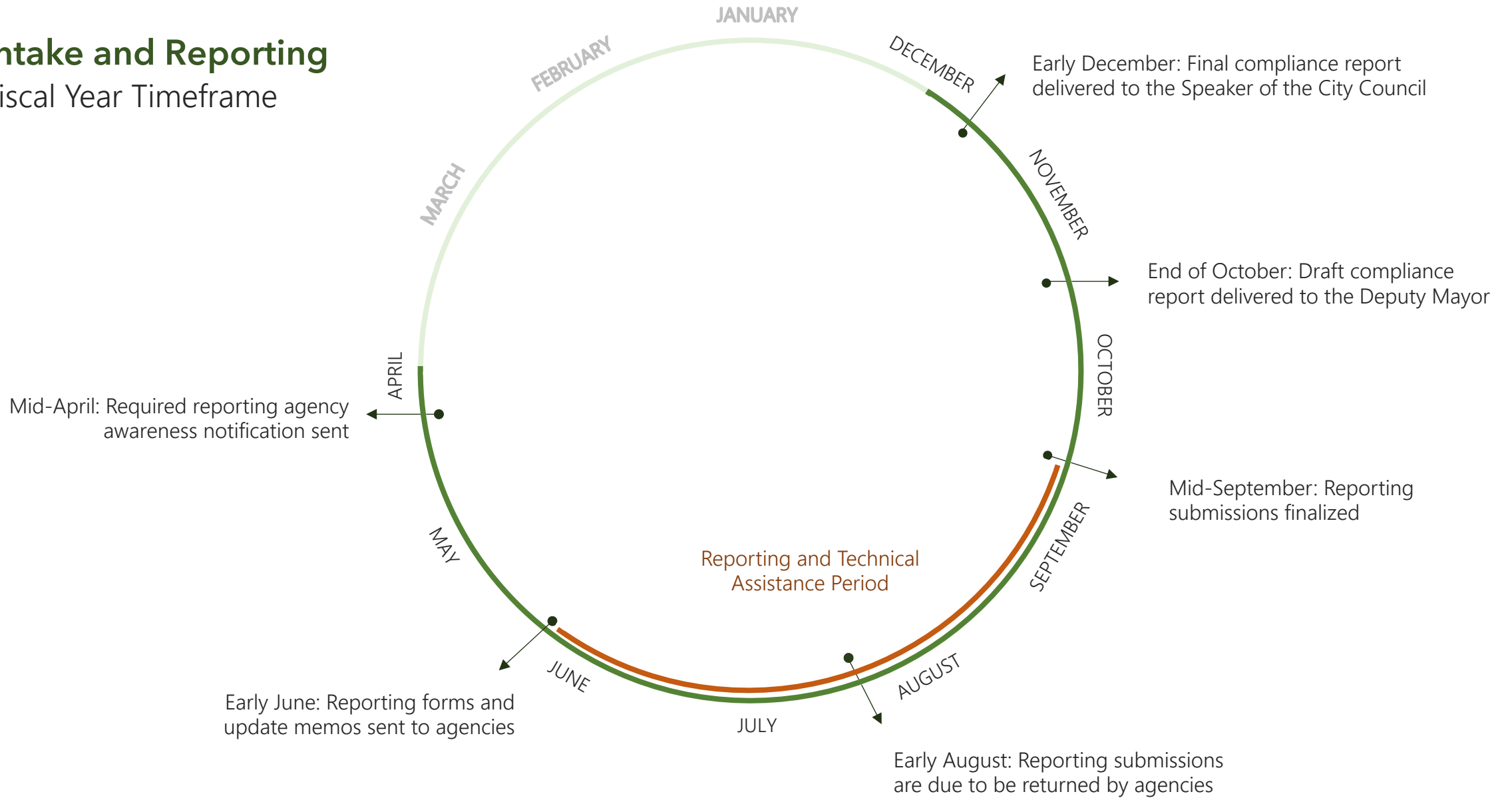
Annual Compliance Reviews



Source: Agencies,
OMB, MOCS, DOB

Intake and Reporting

Fiscal Year Timeframe



Mayor's Office Of Environmental Coordination
NYC Capital Green Building Program

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