

16

Greenhouse Gas Emissions and Climate Change

Analysis of greenhouse gas (GHG) emissions under CEQR is typically conducted to determine a project's consistency with the City's Citywide GHG reduction goal. It focuses on those projects that have the greatest potential to produce GHG emissions that may result in inconsistencies with the GHG reduction goal to a significant degree and, correspondingly, have the greatest potential to reduce those emissions through the adoption of project measures and conditions.

Introduction

As discussed in the *CEQR Technical Manual*, increased concentrations of greenhouse gases (GHGs) are changing the global climate, resulting in wide-ranging effects on the environment—including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt locally. New York City's sustainable development policy, starting with *PlaNYC* and continued and enhanced in *OneNYC*, established sustainability initiatives and goals for greatly reducing GHG emissions and for adapting to climate change. The goal to reduce

citywide GHG emissions to 30 percent below 2005 levels by 2030 was codified by Local Law 22 of 2008, known as the New York City Climate Protection Act (the "GHG reduction goal"). This goal was developed for the purpose of planning for a population increase of almost one million residents while achieving significant GHG reductions. In this same vein, on November 13, 2014, the City Council passed a bill to reduce citywide greenhouse gas emissions by 80 percent by 2050. The bill was adopted on December 14, 2014 (Local Law 66 of 2014).

Since it is not possible to evaluate the possible effects of any specific development, as the specific location of future development projects is unknown, the GHG assessment is based on prototypical sites as defined and described in **Chapter 1, "Project Description."**

Principal Conclusions

A screening analysis for GHG emissions and climate change was conducted on the prototypical sites pertaining to the shift from non-hotel use (i.e., a residential or different commercial use) in the No-Action condition to commercial hotel use in the With-Action condition. Since the proposed action would not facilitate development greater than 350,000 gsf on a single development site at any of the seven prototypical development sites, or involve other energy intense projects, the proposed action would not affect GHG emissions or climate change conditions and would be consistent with the City's GHG and climate change goals.

Screening Analysis

As mentioned above, the City has established sustainability initiatives and goals for greatly reducing GHG emissions and for adapting to climate change in the City. Generally, a GHG emissions assessment is only conducted for energy-intensive and other larger projects undergoing an EIS, as they have a greater potential to be inconsistent with the City's GHG reduction goal to a significant degree. More specifically, a GHG consistency assessment is typically warranted for city capital projects subject to environmental review, or projects that propose either power generation (not including emergency backup power, renewable power or small-scale cogeneration) or regulations and other actions that fundamentally alter the City's solid waste management system by changing solid waste transport mode, distances or disposal technologies. In addition, an EIS for a project that would result in development of 350,000 square feet or greater would also warrant an assessment.

As described in **Chapter 1, "Project Description,"** the proposed action is not development-inducing and would not facilitate development greater than 350,000 square feet on a single development site or involve other energy intense projects at any of the prototypical sites, and consequentially, a GHG consistency assessment is not warranted. The proposed action would not be inconsistent with the City's emissions reduction goals, as defined in the *CEQR Technical Manual*, or fundamentally change the City's solid waste management system. Also, as described

in **Chapter 13, "Energy,"** the proposed action would not result in significant adverse impacts on energy consumption.

Resilience of Proposed Action to Climate Change

Standards for analysis of the effects of climate change are still being developed and have not yet been defined in CEQR. However, the Waterfront Revitalization Program (WRP)¹ addresses climate change and sea-level rise. The WRP requires consideration of climate change and sea-level rise in planning and design of development within the defined Coastal Zone Boundary. As set forth in more detail in the *CEQR Technical Manual*, the provisions of the WRP are applied by DCP and other City agencies when conducting environmental review.

The proposed action is applicable to M1 districts citywide (with some exceptions) and affects the other as-of-right districts across the city, many of which are located in the current flood zone and/or areas susceptible to sea level rise. Therefore, sites that are affected by the proposed action may be located in current or future flood zones. The proposed action establishes new restrictions on hotel development, requiring a discretionary process for proposed hotel development in M1 districts. Therefore, future development applications for sites in the city's flood zone will be subject to further review to ensure that adaptive measures are incorporated where necessary. In addition, the proposed action would not induce development on sites that would not otherwise be developed with another use, and therefore does not create further vulnerabilities to flooding and sea level rise. All developments would be subject to existing federal, state, and local floodplain regulations. Finally, proposed action would not hinder the ability of future developments to incorporate adaptive measures to mitigate flood risk. Therefore, the proposed action is consistent with the city's policy on climate change.

Conclusion

A screening analysis for GHG emissions and climate change was conducted on the prototypical sites pertaining to the shift from non-hotel use (i.e., a residential or different commercial use) in the No-Action condition to commercial hotel use in the With-Action condition. Since the proposed action would not facilitate development greater than 350,000 gsf on a single development site at any of the seven prototypical development sites, or involve other energy intense projects, the proposed action would not affect GHG emissions or climate change conditions and would be consistent with the City's GHG and climate change goals.

¹ City of New York Department of City Planning. *The New York City Waterfront Revitalization Program*. October 30, 2013. Approved by NY State Department of State, February 3, 2016.