

16 Greenhouse Gas Emissions and Climate Change

Introduction

As discussed in the 2014 *CEQR Technical Manual*, increased GHG emissions are changing the global climate, resulting in wide-ranging effects on the environment such as sea-level rise, increased temperature, and changes in precipitation levels. Although climate change is occurring on a global scale, its environmental effects are also likely to be felt locally. New York City's sustainable development policy, starting with *PlaNYC* and continued and enhanced in *OneNYC*, establishes sustainability initiatives and goals for reducing GHG emissions and adapting to climate change. The goal to reduce citywide GHG emissions to 30 percent below 2005 levels by 2030 was developed for the purpose of planning for a population increase of almost one million residents while achieving significant GHG reductions. This goal has been codified by Local Law 22 of 2008, known as the New York City Climate Protection Act (the GHG reduction goal). This goal was expanded in 2014 via the adoption of Local Law 66, which commits the City to reduce citywide GHG emissions by 80 percent by 2050.

The Proposed Actions are not expected to induce development that would not otherwise occur in the No Action scenario, nor are they expected to facilitate the development of energy-intensive uses. However, because the Proposed Actions would modify land use actions necessary to facilitate site development (i.e., certifications, authorizations, and special permits), they could increase the number of as-of-right development sites. Therefore, a GHG screening analysis was completed for the Proposed Actions. Because the location of specific development sites is unknown, the screening analysis is based on four prototypical analysis sites.

Principal Conclusions

The Proposed Actions, as analyzed through four representative prototypical sites, are not anticipated to result in significant, adverse impacts related to GHG emissions or climate change.

A screening analysis for GHG emissions and climate change was conducted for the Proposed Actions by comparing the development of prototypical analysis sites in the No Action scenario to the With Action scenario. The Proposed Actions would not involve other energy-intensive projects or result in development greater than 350,000 square feet at any of the prototypical analysis sites. The Proposed Actions would conserve natural habitats and wetland areas that perform valuable ecosystem services, including stormwater absorption, flood mitigation, and temperature regulations; and as such, would serve to improve and strengthen the sustainability and resiliency of the proposed SNRD.

Screening Analysis

As mentioned above, the City established sustainability initiatives and goals for reducing GHG emissions and adapting to climate change in the City. In general, GHG emissions assessments are conducted only for energy-intensive and other larger actions where GHG emissions that may be significantly inconsistent with the City's GHG reduction goal could be produced. 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, a GHG assessment is warranted for actions that would result in the development of 350,000 square feet or more.

As noted earlier, the Proposed Actions are not expected to be growth inducing and would not facilitate development greater than 350,000 square feet on a single prototypical analysis site. In addition, the prototypical analysis sites do not include energy-intensive uses or power generation. Therefore, a GHG consistency assessment is not warranted for the Proposed Actions. The Proposed Actions would not be inconsistent with the City's emissions reduction goals or fundamentally change the City's solid waste management system. Furthermore, as described in **Chapter 13, Energy**, the Proposed Actions would not result in significant, adverse impacts on the generation or transmission of energy.

Resilience of Proposed Actions 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, climate change and sea-level rise are addressed in the City's WRP. The WRP requires consideration of climate change and sea-level rise in the planning and design of development within the defined Coastal Zone Boundary. As detailed in the 2014 *CEQR Technical Manual*, the provisions of the WRP are applied by DCP and other City agencies when conducting environmental review.

The Proposed Actions would affect a portion of the Bronx that is currently located in the coastal zone, as well as areas located in the existing flood zone and/or susceptible to sea level rise. As such, the Proposed Actions may affect sites located in current or future flood zones. As discussed in **Chapter 2, Land Use, Zoning and Public Policy**, and summarized below, the WRP assessment for the Proposed Actions shows that the actions would be consistent with and supportive of applicable WRP policies. Additionally, the public policy assessment finds that the Proposed Actions would be supportive of the *OneNYC's* sustainability and resiliency goals as part of a broader ecological strategy to protect natural resources.

The Proposed Actions would create a framework for new development in areas with significant natural features to protect and enhance the City's most ecologically sensitive resources. The Proposed Actions are intended to create clear guidelines to preserve and expand large natural areas and to preserve and create smaller patches of habitat that serve as stepping-stones between larger natural areas. Intact natural habitats perform valuable ecosystem services, including stormwater absorption, flood mitigation, air and water filtration, and temperature regulation. The Proposed Actions would conserve natural areas, protect and restore wetlands and ecological habitats, and preserve natural resources such as trees, vegetation, and wetlands. Therefore, the Proposed Actions would increase and strengthen resiliency to climate change.

Conclusion

As noted above, the screening analysis showed that the Proposed Actions would not affect GHG emissions or climate change and would conserve natural habitats that perform valuable ecosystem services, thereby improving the sustainability and resiliency of the affected areas. As such, the Proposed Actions would be consistent with the City's GHG and climate change goals.

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