



NYCTM SUSTAINABLE
Buildings



LOCAL LAW 97 of 2019
Adjustments Application
Filing Guide

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1. PURPOSE OF THIS FILING GUIDE

A. Background & Summary

Local Law 97 of 2019 passed by the City Council as part of Mayor Bill de Blasio's Green New Deal, is an unprecedented commitment to increase the sustainability of buildings, the single-largest source of greenhouse gas (GHG) emissions in New York City. The law became effective on November 15, 2019. This guide has been created to assist applicants with the building emissions limit adjustment application filing process for buildings with qualified excess emissions (section 28-320.8) and qualified not-for-profit healthcare facilities (28-320.9). This filing guide does not address applications for general adjustments (28-320.7); which will be explained in a future guide. This guide includes the following sections:

- The section on **Adjustment Eligibility** contains information to assist in determining covered building status, calculating the gross square footage of the occupancy groups within the building, and determining the requirements for each adjustment type.
- The **Adjustment Application Process** identifies key due dates and minimum requirements for an application. In the DOB NOW section, one will find explanations for the information required as inputs in DOB NOW.
- The **Required and Supporting Documentation** section provides a detailed description of how to prepare the required uploads for submission in DOB NOW. Included in this section is information required for each respective document along with the coordination required between the documents and DOB NOW inputs.
- The filing guide also includes sections addressing **Issuance of Objections** and **Issuance of Determination**.
- How to determine gross floor area for the entire building, for each occupancy, and guidelines for converting Portfolio Manager Occupancy to the limits in the law, are covered in the **References** section.
- **Additional Resources** includes a list of resources to further assist in the filing process. This includes how to contact NYC DOB staff for assistance.

B. Benefits of Adjustments

Adjustments are not an exemption from the law. An adjustment only temporarily raises the building emissions limit to allow for more time for compliance due to a qualifying circumstance. Eligibility requirements for each type of adjustment need to be met as described in the law and are explained in this filing guide.

Note that the adjusted limits are based on a percentage of the actual building emissions for calendar year 2018 and conversion factors within the law and department guidance. The actual adjusted amount depends on the type of adjustment and the compliance period.

2. ADJUSTMENT APPLICATIONS

A. Overview

Generally, this guide addresses adjustment applications which are filed and applied to a building individually. For applicants wishing to group multiple buildings under one application, you must contact the Department for guidance. Applications are submitted through DOB NOW Safety. All adjustment applications associated with a common central plant should be noted in each application. Applications in DOB NOW will be assigned an **Adjustment Request Number**. This number should be noted on all associated uploads in DOB NOW. Communications to the Department should also reference the **Adjustment Request Number**.

Information submitted for the adjustment application will be used to verify compliance. For future building emission reporting to the Department, the applicant will be required to certify with each report how any conditions supporting an approved adjustment might have changed.

B. Types of Adjustment

There are two types of adjustments currently available:

1. AC 28-320.8 “Adjustment to applicable annual building emissions limit for calendar years 2024-2029,” for buildings with excessive emissions due to a special circumstance. Details are outlined in section 3 of this guide.

or

2. AC 28-320.9 “Adjustment to applicable building emissions limit for not-for-profit hospitals and healthcare facilities,” for not-for-profit hospitals and healthcare facilities. Details are outlined in section 4 of this guide.

C. Key Due Dates

Applications under **28-320.8** for covered buildings with excessive emissions due to a special circumstance need to be submitted **no later than June 30, 2021**. The adjustment to the annual building emissions is applicable for calendar years 2024-2029.

Applications under **28-320.9** for covered buildings classified as not-for-profit hospitals and healthcare facilities need to be submitted **no later than July 21, 2021**. The adjustment to the annual building emissions is applicable to calendar years 2024-2029 and 2030-2034, each with their respective adjustment.

3. ADJUSTMENT FOR EXCESSIVE EMISSIONS DUE TO SPECIAL CIRCUMSTANCE (AC 28-320.8)

A. Eligibility

An adjustment to the applicable annual building emissions limit for calendar years 2024-2029 may be granted pending compliance with AC 28-320.8.

To be eligible for this adjustment:

- an applicant must show that the covered building's emissions for calendar year 2018 exceed the 2024 building emissions limit by more than 40%;
- the excess building emissions must be attributable to a **special circumstance** related to the use of the building;
- the covered building's energy performance needs to be equivalent to that of a similar building in compliance with the 2014 New York City Energy Conservation Code (NYCECC); and,
- a plan indicating the covered building's path to reduce the actual building emissions to comply with building emissions limits for 2030-2035 must also be submitted.

i. Excess Building Emissions

The building emissions must be calculated based upon the actual energy used by the building for calendar year 2018 (CY 2018). The CY 2018 actual emissions must exceed the limits set for 2024-2029 as prescribed by section AC 28-320.3.1 by more than 40%.

ii. A Special Circumstance

At least one special circumstance related to the use of the building and the respective building emissions must be documented. The energy consumption attributable to the special circumstance should be unique or unusual as compared to buildings with similar occupancy.

Special circumstances may include, but are not limited to:

- 24-hour operations (for occupancies/buildings that would otherwise not normally operate 24 hours daily)
- Operations critical to human health and safety
- High density occupancy
- Energy intensive communications technologies or operations
- Energy-intensive industrial processes typically classified as an un-regulated load under the Energy Code.

The **Special Circumstance** must also result in more than 40% of the 2024-2029 building emissions limit applicable to the building. **A narrative description of the special circumstance may be documented in the EN97A Workbook; refer to EN97A instructions for more detail. See section 3.D.iii for details on the EN97A Workbook.**

iii. Energy Performance Equivalent with the 2014 NYC Energy Conservation Code (NYCECC)

To be granted an adjustment, the law requires that the energy performance of a building be equivalent to that of a building in compliance with the 2014 NYC Energy Conservation Code (ECC). Equivalent energy performance should be based upon annual building emissions **AFTER** removing the effect of the Special Circumstance on building emissions.

Applicants are required to demonstrate one of the following:

a. Building is currently equivalent to the 2014 NYCECC

For the purpose of submitting an application, a building is currently equivalent to the 2014 NYCECC under the following conditions:

- The CY2018 emissions are more the 40% above the 2024 limit, and
- All of the emissions in excess of the limit are attributable to one or more special circumstance(s).

Buildings permitted and built under the 2014 NYCECC, or later version, should provide their DOB job number as evidence of equivalency.

Note that part of the review will be a qualitative check for equivalency of the actual building versus a 2014 NYCECC compliant building. The department may require additional documentation to establish equivalency. This documentation may demonstrate that the building is not equivalent to the 2014 NYCECC. In such case, see subparagraph **"b. Building is NOT currently equivalent to the 2014 NYCECC below."**

b. Building is NOT currently equivalent to the 2014 NYCECC

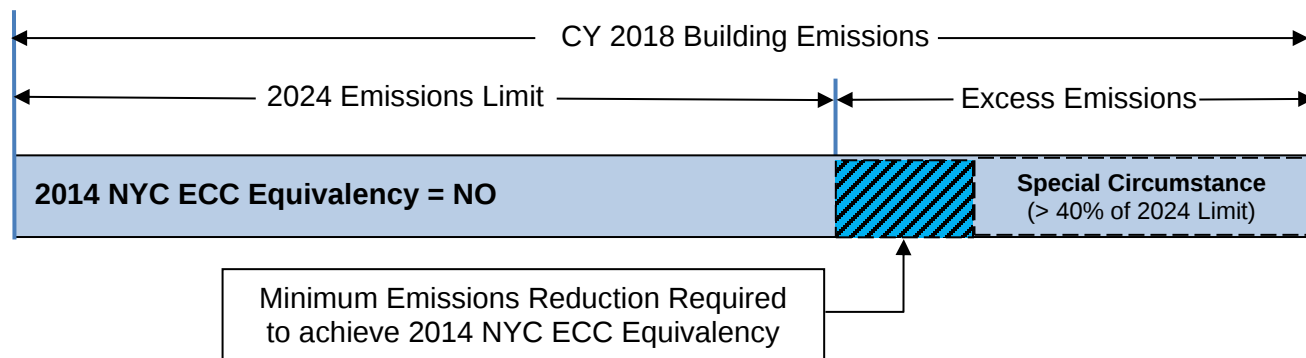
For the purpose of submitting an application, a building is NOT currently equivalent to the 2014 NYCECC under the following conditions:

- The CY2018 emissions are more than 40% above the 2024 limit, AND
- the emissions related to the special circumstance are greater than 40% of the 2024 limit, BUT the special circumstance alone **does not** account for all the excess emissions.

REQUIRED for §320.8

If after accounting for the emissions of the special circumstance, the actual emissions for a calendar year **from now through 2023** exceeds the 2024 emissions limit, then equivalency has not been demonstrated and an adjustment cannot be granted.

For the purpose of submitting an application, the excess emissions not attributed to the Special Circumstance are the targeted emissions that the building must reduce to achieve equivalency with the energy performance of a building in compliance with the 2014 NYCECC (see figure below). Consequently, the applicant needs to provide an ECC Equivalency Report that includes a schedule of alterations or changes to operations and management which reach the targeted reduction necessary to establish equivalency. For example, if there is a difference between the total excess emissions and the excess emissions due to a special



circumstance, then the difference may be attributed to the building not being equivalent currently with the 2014 NYCECC (e.g., Excess Emissions: 60% Total - 40% Special Circumstance => 20% ECC non-equivalence).

Note that part of the review will be a qualitative check for equivalency of the actual building versus a 2014 NYCECC compliant building. The department may require additional documentation to establish equivalency. This documentation may demonstrate that the building needs to reduce emission further below the 2024 limit to achieve equivalency the 2014 NYCECC, and other documentation (e.g., ECC Equivalency Report, DOB NOW) may need to be revised.

The application for an adjustment will not be approved prior to receiving documentation that demonstrates that equivalency has been achieved. This will be tracked as an open objection with the application until receiving acceptable documentation. By February 15, 2025, the applicant will need to submit documentation demonstrating the that targeted emissions reduction has been achieved. This documentation may be based on either the actual energy use for a calendar year or on any other methodology acceptable to the Department. The documentation can be based on energy use for 2024 or before.

iv. Effective Period of an Adjustment (AC 320.8.1)

An approved building emissions adjustment application per AC 28-320.8 Excessive Emissions due to Special Circumstance is effective for building emissions reports during reporting years 2025-2030, **provided that the certificate of occupancy has not been amended after December 31, 2018.**

The adjusted emission limit will be 70% of the CY 2018 emissions less the emissions reduction required to achieve equivalency with the 2014 NYC ECC.

REQUIRED for §320.8

If the certificate of occupancy was amended after December 31, 2018, then an adjustment cannot be granted. If the certificate of occupancy is amended after an adjustment has been granted, then the adjustment will not be allowable for reporting years after the Certificate of Occupancy has been changed.

B. Application Process

Applications are submitted in DOB NOW Safety. The application requires certain information for each building. Just as every building is unique, the applications for adjustment may vary from one building to the other. Step-by-step instructions are detailed in the DOB NOW User Guide and sections 3.C and 3.D of this guide. Applications in DOB NOW will be assigned an **Adjustment Request Number**. This number should be noted on all associated uploads in DOB NOW. Communications to the Department should also reference the **Adjustment Request Number**. Applications will include information submitted directly in the DOB NOW system, along with technical documents and backup uploaded to DOB NOW, as summarized in the following table:

Excessive Emissions due to Special Circumstance (320.8)	
Required Entry in DOB NOW	Required uploads to DOB NOW
Building Emissions Limit	Stacking Diagram
2018 Actual Building Emissions	EN97A Energy Analysis Workbook
	Energy Analysis Report
ECC Equivalency Summary (Only for buildings not currently 2014 NYCECC equivalent)	Emissions Reduction Plan Report
Emissions Reduction Plan Summary	
Future Energy Use Breakdown Summary	

C. DOB NOW Required Information

Location and stakeholder information must be provided. The applicant of record and filing representatives must be registered with the Department of Buildings. Applications must be submitted by a registered design professional. Only the stakeholders listed in the application may contact the Department about the filing.

OWNER RESPONSIBILITY

The owner should provide accurate information to the applicant of record. Once the application is completed, the owner should review and verify all the information submitted by the Applicant of Record is correct.

APPLICANT OF RECORD RESPONSIBILITY

The applicant of record should verify that the information provided by owner and entered into DOB NOW is accurate to the best of their ability.

i. Building Emissions Limit

Applicants must demonstrate that the building has excess emissions due to a special circumstance, thus they need to establish the emissions limits for the building, based on the occupancies in the building. In the Building Emissions Limit - Excessive Emissions Due to Special Circumstances (AC 28-320.8) screen of DOB NOW, the applicant will enter the occupancy groups in the building and their respective gross floor areas to determine the 2024 and 2030 emissions limits. The information provided should be coordinated with the required Stacking Diagram, data submitted elsewhere in the application, and generally should be consistent with the Certificate of Occupancy, if the building has one. See **Stacking Diagram** in section 3.D.i of this guide for preparation and submission requirements for the required Stacking Diagram.

- Every space on every floor in the building must be assigned an Occupancy Group Classification (A; B; B*; E; F; H; I-1; I-2; I-3; I-4; M; R-1; R-2; S; U) as per AC 28-320.3.1. Multiple occupancy groups can be selected, and at least one is required. See **Occupancy Conversion** in section 7.B of this guide for occupancy conversion chart.
- See **Determining Gross Floor Area** in section 7.A of this guide for instructions on measuring occupancy gross floor area.

ii. 2018 Actual Building Emissions

Once the applicant has established the emission limits for the building, based on the occupancy, the application must document the actual energy use of the building. The applicant will enter actual energy use for CY 2018 in DOB NOW, including all the energy sources or fuel types used in the building and information about the meters for the energy sources. The energy use entered will be the basis for calculating actual building emissions. See **Energy Usage Documentation** in section 3.D.v of this guide for preparation and submission requirements. The information provided should be coordinated with the **EN97A** workbook. See **EN97A** instructions for preparation and submission requirements.

- The total number of energy meters for each energy source or fuel type in the building will be part of application. The meters reported should include ALL utility meters that deliver energy to the building even if physically located elsewhere. Include ALL meters associated with the building address even if not related to energy use for this building (e.g., electric vehicle charging stations, unregulated process loads, meters serving other buildings, etc.) For energy sources delivered in bulk each account should be considered one meter (e.g., fuel oil, propane).
- If the energy use for ANY meter is not being reported in this application for any reason, or if any reported meter provides energy to another building not being reported in this application, then provide an explanation about why this energy use has not been included. This narrative should be part of the “Energy Usage Documentation” uploaded to DOB NOW.

- Every energy source used in the building must be identified, regardless of whether they were excluded from the 2018 benchmarking data.
- The data entered in DOB NOW will be the aggregated sum of all the meters and bulk deliveries for each energy source or fuel type in DOB NOW. However, the energy data included in the EN97A workbook will include monthly breakdowns for each energy source.
- When a fuel type is delivered in bulk to the building for storage prior to actual use (e.g. oil, solid fuels, biomass), the annual fuel use for that energy type is calculated as follows:

Annual fuel use = A + B – C

where

A = measured inventory of the fuel type at the beginning of the 12-month period

B = the amount of the fuel type delivered to the building during the 12-month period

C = measured inventory of the fuel type at the end of the 12-month period

See **Energy Source and Fuel Type Coefficients** in section 7.c of this guide for coefficients. Fuel types that are not listed but used in the building should be reported and the applicant should provide the proposed heat content value and proposed emissions factor as well as the technical reference or source for the proposed values within the **Energy Usage Documentation** uploaded to DOB NOW.

iv. Special Circumstance

After establishing the emissions limit and actual emissions for the building, the applicant needs to demonstrate that a special circumstance in the building is responsible for the actual emissions in excess of the limit by more than 40%. The emissions related to the Special Circumstance will be determined based on the data entered in the EN97A workbook. The narrative related to the Special Circumstance can be entered directly into the EN97A workbook. The aggregate value of the emissions needs to be entered into the DOB NOW application.

The Special Circumstance Report is required for all applications and should explain how the special circumstance is responsible for the excess emissions and include supporting calculations and documentation, which should be coordinated with the DOB NOW application. The narrative should provide details of the various factors, building conditions and occupancy patterns that encompass the special circumstance. If more than one special circumstance is present in the building, describe each separately. This description may include information regarding occupant density, usage patterns, base building systems operating, and occupant/equipment schedules (e.g., occupied, unoccupied periods, seasonal

periods) as necessary. The narrative should include quantitative evidence from measured data, calculations, metering, or sub-metering data.

The detailed information used to demonstrate the special circumstance may come from measurement & verification or other robust empirical methodologies to illustrate the factors.

DOB NOW will calculate whether the emissions for the Special Circumstance meet the criteria necessary to qualify for the adjustment per 28-320.8.

v. 2014 NYC Energy Conservation Code (NYCECC) Equivalency

The building emissions must be equivalent to that of a similar building in compliance with the 2014 NYCECC. To determine equivalency, the emissions for the Special Circumstance will be deducted from the 2018 Actual Building Emissions to establish the 2018 Adjusted Building Emissions.

- If the 2018 Adjusted Building Emissions is less than 2024 Building Emissions Limit, then the applicant may submit the application and equivalency will be reviewed by the Department.
- If the 2018 Adjusted Building Emissions is greater than 2024 Building Emissions Limit, then the difference is calculated in DOB NOW and referred to as “ECC Equivalent Min. GHG Reduction Required”. Additionally, the applicant will need to do the following:
 - Include in the **Emissions Reduction Plan Report** the measures that will be used to reduce emissions by at least the “ECC Equivalent Min. GHG Reduction Required” to achieve equivalency.
 - Complete the “ECC Equivalency Summary” in DOB NOW based on the information included in the **Emissions Reduction Plan Report**. A detailed explanation of the elements required of the plan to achieve equivalency can be found in the Emissions Reduction Plan Report in section 3.D.ii of this guide.

Note that part of the Department’s review for all applications will be a qualitative check for equivalency of the actual building versus a 2014 NYCECC compliant building. The Department may require additional documentation to establish equivalency (e.g., energy modeling). This documentation may demonstrate that the building needs to reduce emissions further below the 2024 limit to achieve equivalency to the 2014 NYCECC, and other documentation (e.g., ECC Equivalency Report, DOB NOW) may need to be revised.

vi. Emissions Reduction Plan Summary

For a building to be granted an adjusted limit, the owner must submit a plan for how the building will comply with the limits of 28-320.3.2 by 2030. A summary of this plan will be entered in DOB NOW and should be coordinated with the required **Emissions Reduction Plan Report** that must be submitted as an uploaded document. Detailed explanation of the components can be found in the **Emissions Reduction Plan Report** in section 3.D.ii of this guide.

vii. Future Energy Use Breakdown Summary

The **Emissions Reduction Plan Report** will include a summary of the future energy use of the building after implementing the Emissions Reduction Plan. This summary will break down the future energy performance of the building by end use and energy source. The energy use breakdown will be entered into the “Future Energy Use Breakdown Summary” in DOB NOW. See “**Emissions Reduction Plan Report**” in section 3.D.ii of this guide for preparation and submission requirements.

D. Required and Supporting Documentation uploads to DOB NOW

This section provides guidelines to prepare and submit supporting documentation which will be uploaded to the DOB NOW system. The information in the DOB NOW application inputs should be based on information included in the supporting documents described in this section.

DOB NOW asks the applicant to provide each document as a separate required upload. If the applicant decides to combine one or more of these reports, then they should upload a document in place of the required upload explaining where the reviewer can find the information associated with the required document(s).

i. Stacking Diagram

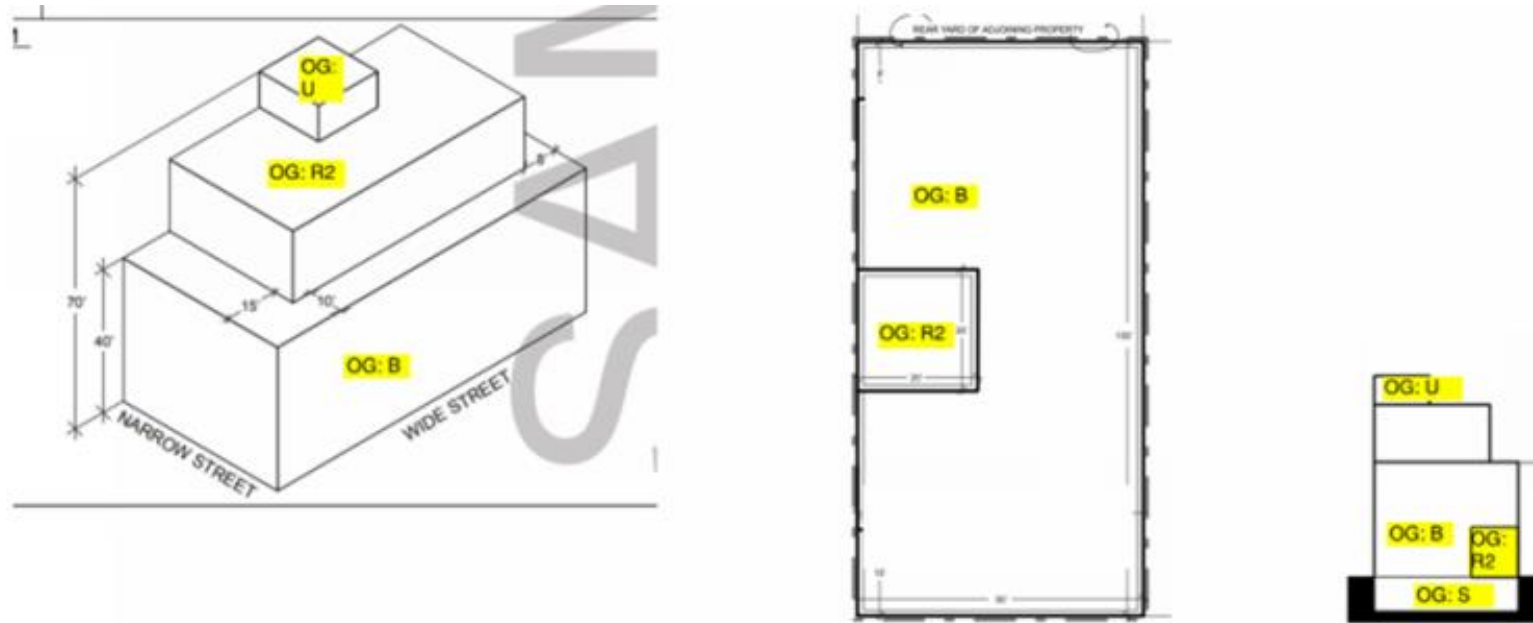
The stacking diagram graphically summarizes the occupancy group breakdown of the building and should be coordinated with information provided in the **Establishing Building Emissions Limit** screen of the application in DOB NOW. The applicant should provide sufficient information to illustrate uses in the building. See **below** for example. Information provided in the stacking diagram document may include:

- An occupancy use breakdown table indicating the gross floor area per occupancy per floor of the entire building. Floors can be entered individually or as a range when floors are identical. If entered as a range, the sum of all the floors in the range should be presented.

- As needed, an axonometric blocking diagram or floor area diagrams of the building noting the occupancies should be provided and coordinated with the table.
- A diagrammatical section may be included to clearly demonstrate occupancy breakdown if necessary. This may be helpful in demonstrating more than one occupancy on a floor or occupancies below grade.
- When a floor has more than one occupancy, a floor area diagram showing the boundaries of each occupancy may be provided.

Stacking Diagram Example – Adjustment for Excessive Emissions due to Special Circumstance (AC 28-320.8)

Location Info: Address; BBL; BIN; Application Number				
Occupancy Group Classifications (AC 320.3.1)				
Floor	B	R-2	S	U
Cel			5000	
001	4500	500		
002-006	25000			
007-008				
009				500
Total	29500	500	5000	500
Total Building Gross Floor Area			35500	



ii. Emissions Reduction Plan Report

The Emissions Reduction Plan illustrates a path for the building to achieve compliance with the annual building emissions limits for calendar years 2030 through 2034. If compliance is not demonstrated, the application **will not** qualify for an adjustment of annual building emissions. The information in the report is the basis for the inputs in the **Emissions Reduction Summary**, the **Future Energy Use Breakdown Summary**, and, as required, the **ECC Equivalency Summary** for the application in DOB NOW.

This report must describe the scope of the emissions analysis performed. This includes detailed descriptions of engineering analysis, focused on potential capital-intensive projects identified and the strategies to be implemented to reduce building emissions. For example - which energy conservation measure (ECM) is proposed; which building system it will affect; and, what proposed reductions are anticipated from implementing each strategy.

The **Emissions Reduction Plan Report** should include sufficient information to understand the measures being proposed and how their associated savings were estimated. This report is likely to include but not be limited to the following information:

- The proposed **strategy type**:
 - **Energy Conservation Measure (ECM)**, conserving energy, including but not limited to, changing light fixtures and lamps, installing energy efficient appliances, use of programmable thermostats, sealing air leaks, automated control of electrical devices, upgrades to HVAC equipment, automated controls for exterior lighting, etc.
 - **Retro-Commissioning Measure (RCM)**, processes that improve the efficiency of an existing building's equipment and systems, including but not limited to, equipment and lighting use schedules, elimination of simultaneous heating and cooling, properly operating economizers, balancing systems, proper functioning of belts and valves and control sequences, etc.
 - **Operations & Maintenance Measure (OMM)**, the functions, duties and labor of daily building operations, including but not limited to, enhancing operating efficiency of building systems, managing building operations, preventative maintenance, etc.
 - **Distributed Energy Resource (DER)**, as defined in AC 28-320.1, is “a resource comprised of one or multiple units capable of generating or storing electricity, all at a single location that is directly or indirectly connected to an electric utility transmissions and distribution system”. Any distributed energy resource that meets this definition and is not classified as a Clean Energy Distributed Resource for generation and storage.
 - **Clean Distributed Energy Resource (CDER) Generation**, as defined in AC 28-320.1, uses any of the following sources to generate electricity: hydropower, solar photovoltaics, geothermal wells or loops, tidal action, waves or water currents, or wind.
 - **Clean Distributed Energy Resource (CDER) Storage**, as defined in AC 28-320.1, is “designed and operated to store energy, including but not limited to, batteries, thermal systems, mechanical systems, compressed air, and superconducting equipment.”
 - **Fuel Cell**
 - Any other strategy not included under the above categories.

- Describe the **primary system type affected** including the specific component(s) of the system. In the DOB Emissions Reduction Summary screen, the various building systems are broken down into components. For example, the components of the building envelope in DOB NOW include the windows, walls, and roof. The report should explain the effect on the specific components of the system.
- Provide a detailed description with calculations to support the analysis of the energy use and GHG emissions including, but not limited to the following:
 - o Existing energy use/consumption and emissions of the building and the analysis method utilized,
 - o Estimated energy and emissions savings, specifying impact by fuel type, strategy, and primary system affected,
 - o GHG emissions savings anticipated from proposed strategy and the aggregated GHG reductions, and illustrate that the building will meet the Emissions limit for the 2030-2034 reporting period,
 - o Basis and references for the savings calculations.

Additionally, if the building's energy performance is not currently equivalent to the 2014 NYCECC, then this plan will need to include a section that describes the measures that will be used to achieve equivalency. The level of detail regarding the measures and the emissions reductions are the same as required for the general **Emissions Reductions Plan**. The ECC Equivalency measures and emissions reductions will be entered into the "ECC Equivalency Summary" of the DOB NOW application. The results for these measures will also be included as part of the overall emissions reductions to achieve the 2030 emissions limit.

If an applicant would prefer to demonstrate equivalency with the 2014 NYCECC by use of energy modeling, then associated modeling results for the 2014 NYCECC Baseline Model need to be included in the EN97A workbook (refer to EN97A instructions for more information).

iii. EN97A - Energy Analysis Workbook

The Department has prepared a Microsoft Excel workbook to assist applicants in preparing their submission. The Workbook contains multiple worksheets that support the various parts of an application. The workbook provides backup information and is programmed to calculate certain values that will be entered into the DOB NOW system. The EN97A Energy Analysis Workbook has instructions on how to prepare for submission. The applicant needs to upload both a

PDF copy of the Workbook AND a copy of the Excel workbook. The PDF copy of the EN97A Workbook should be stamped and signed by the RDP responsible for preparing the Workbook and the information contained therein. Should an applicant experience an error with the workbook programming, please reach out to the Department to bring it to our attention by e-mailing GHGEmissions@buildings.nyc.gov.

iv. Energy Analysis Report

The **Energy Analysis Report** is a technical report prepared by the applicant to support the information included in the DOB NOW application. The **Energy Analysis Report** should include a section that describes the Special Circumstance, and should include the building address, borough, block and lot, BIN, application number and applicant's seal and signature.

- Supporting Documentation
 - The assumptions shall be documented in the report and should align with the corresponding building component in the EN97A workbook;
 - The title or page number of the supporting documentation should be listed in each cell corresponding to the building component in the EN97A workbook to easily correlate the modeling data with the workbook;
 - The building components of the Actual Building model are verified by one of the following methods, as indicated in the EN97A workbook, and included in the report:
 - *Estimated* – components of the building that are estimated, must be documented as such. The applicant should document any relevant sources that have informed the basis of the estimation. Examples of relevant sources would include research reports, ASHRAE Handbook of Fundamentals, etc.
 - *Reported by Site Staff* – assumptions may be derived from information provided by building operators, owners or other staff that have knowledge of the operation and construction of the building. Examples may include the schedule of operation of the building, the building's heating/cooling setpoints, etc.
 - *From Drawings* – modeling information that comes directly from a drawing set of the building may be submitted as documentation. This may include envelope wall assemblies, lighting fixture counts and wattages, HVAC schedules and controls, etc.
 - *Confirmed* – any building components that have been verified by either an energy audit, by visual or measured observation, may be documented in the supporting documents.
 - *Other* – is for any other verification method that is not one of the available methods above.

Energy Modeling Software Reports

Projects that use energy modeling to determine energy consumption breakdowns should provide Energy Modeling Software Reports that support the values reported in DOB and in the Energy Analysis Report. Information in the report should include, but is not limited to the following:

- Results required to be submitted with the EN97A workbook, the data on the reports should align with the values in the EN97A workbook,
- The name/title or page number of the energy modeling report should be listed next to each component in the EN97A workbook to easily correlate the modeling data with the workbook.

v. Energy Usage Documentation

The **Energy Usage Documentation** may be uploaded as a single document and may contain all or portions of the information below.

Energy Calculations

Calculations are required when a meter serves multiple spaces and consumption per space needs to be assigned. The energy consumption per space can be established on an area method. Determine the energy consumption per square foot of the total space served by the meter and multiply by the square footage of the space.

For example, when a meter serves more than one building, the energy consumption for each building needs to be reported separately: Building #123 is the reporting building for an application. Electrical meter #001 reported annual energy consumption of 10,000,000 kWh and serves the reporting building #123 and building #125. Building #123 is 30,000 gross square feet. Building #125 is 25,000 gross square feet. Both buildings total 55,000 gross square feet.

Annual Energy Consumption/Square foot = Consumption per square foot

10,000,000 kWh / 55,000 sqft = 181.82 kWh/sqft

Consumption per Square foot x Square foot of space = Energy consumption of space

181.82 kWh/sqft x 30,000 sqft = 5,454,600 kWh

The energy supplied to building #123 is 5,454,600 kWh for this meter.

Other methods for breakdown, subject to the approval of the Department, can be proposed with supporting calculations and documentation, such as sub-metering.

Meter discrepancies

All meters for all energy sources and fuel types are required to be reported. The data reported should match the **Energy Usage Report** submitted. If there is a discrepancy between the number of meters in the building and the number of meters being reported, or between the reported data and the energy summary, a narrative describing the discrepancy must be submitted. This narrative should include the meter in question and a brief explanation.

For example, some buildings may not report the energy use for all meters because some may be not applicable to its energy use or may serve more than one building. The applicant may state:

1. Meters #005 and #008 are not being reported. The meters serve electrical vehicle charging stations. Therefore, the energy use of these meters is not applicable to the actual emissions of this building.
2. Meter #003 serves the reporting building #123 and 2 other buildings, #125 & 127.

Narrative describing how the energy is assigned to each building.
Provide calculations to support the energy use assignment. See Energy calculations section above for requirements.

CLICK "FILE"

Note that applications in process, but not submitted will not be accepted after the respective due date for each adjustment. **Be sure to click "FILE" prior to the deadline!**

vi. Finalizing Your Application

Submission of supporting documentation in DOB NOW may be executed in the following ways: either an applicant can upload a single report containing all required technical reports and backup documentation in a single PDF, or an applicant may upload the various technical reports and backup documentation as separate PDF uploads.

The applicant should be aware that DOB NOW anticipates that the applicant will provide each required document as a required upload. If the applicant decides to combine one or more of these required documents, then they should

also upload a document in place of the required document explaining where the reviewer can find the information associated with the required document(s).

Each PDF uploaded to the DOB NOW system should include the **Adjustment Request Number**, BIN, BBL, address, and the seal and signature of the applicant. After entering the required information in DOB NOW and uploading the supporting documentation and technical reports, you may submit your application for review. **Please be reminded, an application will not be submitted to the Department until the applicant clicks on “File.”**

4. ADJUSTMENT FOR NOT-FOR-PROFIT HOSPITAL AND HEALTHCARE FACILITIES (AC 28-320.9)

A. Eligibility

An adjustment to applicable annual building emissions limit for calendar years 2024-2029 and 2030-2034 may be granted pending compliance with AC 28-320.9. To be eligible for this adjustment, an applicant must demonstrate not-for-profit building classification in existence on November 15, 2019, and for each year that an adjustment is used as the basis for compliance reporting. For the purposes of AC 28-320.9, not-for-profit classification includes spaces owned or occupied by a not-for-profit hospital or healthcare facility. Documentation requirements can be found in section 4.D of this guide.

Effective Period of an Adjustment (AC 320.9)

An approved building emissions adjustment is effective for Covered Buildings classified as not-for-profit hospitals and healthcare facilities as follows, **provided that the not-for-profit status of the building can be verified:**

- 85% of the applicable building emissions for CY 2018 for building emissions reports during reporting years 2025-2030.
- 70% of the applicable building emissions for CY 2018 for building emissions reports during reporting years 2031-2035.

REQUIRED for §320.9

If the Not-for-Profit status is not maintained continuously as of November 15, 2019, then an adjustment cannot be granted. If the Not-for-Profit status changes after an adjustment has been granted, then the adjustment will not be allowable for reporting years that the Not-for-Profit status does not exist.

This adjustment is not available to not-for-profit entities that are not hospital or healthcare organizations. This adjustment is also not available to hospital or healthcare organizations that are not designated as not-for-profit entities. For commercial owners seeking an adjustment for space leased to a not-for-profit healthcare organization, adjustments can only be approved for leased spaces that are separately metered for electricity.

B. Application Process

NOT-FOR-PROFIT HOSPITALS AND HEALTHCARE FACILITIES (320.9)	
Required Entry in DOB NOW	Required uploads to DOB NOW
Adjustment Application per 320.9	Not-For-Profit Status
Establishing Building Emissions Limit	Stacking Diagram
2018 Actual Building Emissions	EN97A Energy Analysis Workbook
	EN97A Energy Analysis Report (only for applications submitting an energy model)

An application must be submitted in DOB NOW. Step-by-step instructions are detailed in the DOB NOW User Guide and sections 4.C and 4.D of this guide. Applications in DOB NOW will be assigned an **Adjustment Request Number**. This number should be noted on all associated uploads in DOB NOW. Communications to the Department should also reference the **Adjustment Request Number**.

C. DOB NOW Required Information

Location and stakeholder information must be provided. The applicant of record and filing representatives must be registered with the Department of Buildings. Applications must be submitted by a registered design professional. Only the stakeholders listed in the application may contact the Department about the filing.

OWNER RESPONSIBILITY

The owner should provide accurate information to the applicant of record. Once the application is completed, the owner should review and verify all the information submitted by the Applicant of Record is correct.

APPLICANT OF RECORD RESPONSIBILITY

The Applicant of Record should verify that the information provided by owner and entered into DOB NOW is accurate to the best of their ability.

i. Building Emissions Limit

In the Building Emissions Limit - Not-for-Profit Hospital or Healthcare (28-320.9) screen of DOB NOW the applicant will enter the occupancy groups in the building and their respective gross floor areas to determine the 2024 and 2030 emission limits for the filing. The information provided should be coordinated with the required Stacking Diagram, data submitted elsewhere in the application, and should be consistent with the Certificate of Occupancy, if the building has one. See “**Stacking Diagram**” in section 4.D.i of this guide for preparation and submission requirements for the required Stacking Diagram.

- Every space on every floor in the building must be assigned an Occupancy Group Classification (A; B; B*; E; F; H; I-1; I-2; I-3; I-4; M; R-1; R-2; S; U) as per AC 28-320.3.1. Multiple occupancy groups can be selected. At least one is required. See “**Occupancy Conversion**” in section 7.B of this guide for occupancy conversion chart.
- For buildings with leased spaces, the occupancies not included in the not-for-profit portion of the building should be included in aggregate as “other”.
- See “**Determining Gross Floor Area**” in section 7.A of this guide for instructions on measuring occupancy gross floor area.

ii. 2018 Actual Building Emissions

The applicant will enter actual energy use for CY 2018 in DOB NOW. This will include all the energy sources or fuel types used in the building and information about the meters for the energy sources. The energy use entered will be the basis for calculating actual building emissions. See “**Energy Usage Documentation**” in section 3.D.v of this guide for preparation and submission requirements. The information provided should be coordinated with the **EN97A** workbook. See **EN97A** instructions for preparation and submission requirements.

- The total number of energy meters for each energy source or fuel type in the building will be part of application. The meters reported should include ALL utility meters that deliver energy to the building even if physically located elsewhere. Also, include ALL meters associated with the building address even if not related to energy use for this building (e.g., electric vehicle charging stations, unregulated process loads, meters serving other buildings, etc.) For energy sources delivered in bulk each account should be considered one meter (e.g., fuel oil, propane).
- If the energy use for ANY meter is not being reported in this application for any reason, or if any reported meter provides energy to another building not being reported in this application, then provide an explanation about why this energy use has not been included. This narrative should be part of the “Energy Usage Documentation” uploaded to DOB NOW.
- Every energy source used in the building must be identified, regardless of whether they were excluded from the 2018 benchmarking data.
- The data entered in DOB NOW will be the aggregated sum of all the meters and bulk deliveries for each energy source or fuel type in DOB NOW. However, the energy data included in the EN97A workbook will include monthly breakdowns for each energy source.
- When a fuel type is delivered in bulk to the building for storage prior to actual use (e.g. oil, solid fuels, biomass), the annual fuel use for that energy type is calculated as follows:

$$\text{Annual fuel use} = A + B - C$$

where

A = measured inventory of the fuel type at the beginning of the 12-month period

B = the amount of the fuel type delivered to the building during the 12-month period

C = measured inventory of the fuel type at the end of the 12-month period

See “**Energy Source and Fuel Type Coefficients**” in section 7.c of this guide for coefficients. Fuel types that are not listed but used in the building should be reported and the applicant should provide the proposed heat content value and proposed emissions factor as well as the technical reference or source for the proposed values within the “Energy Usage Documentation” uploaded to DOB NOW.

D. Required and Supporting Documentation uploads to DOB NOW

This section provides guidelines to prepare and submit supporting documentation which will be uploaded to the DOB NOW system. The information in the DOB NOW application inputs should be based on information included in the supporting documents described in this section.

DOB NOW asks the applicant to provide each documents as a separate required upload. If the applicant decides to combine one or more of these reports, then they should upload a document in place of the required upload explaining where the reviewer can find the information associated with the required document(s).

i. Stacking Diagram

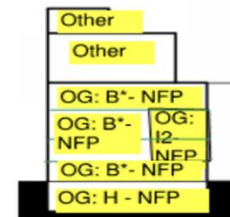
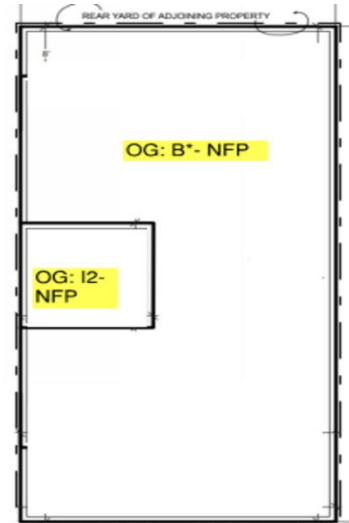
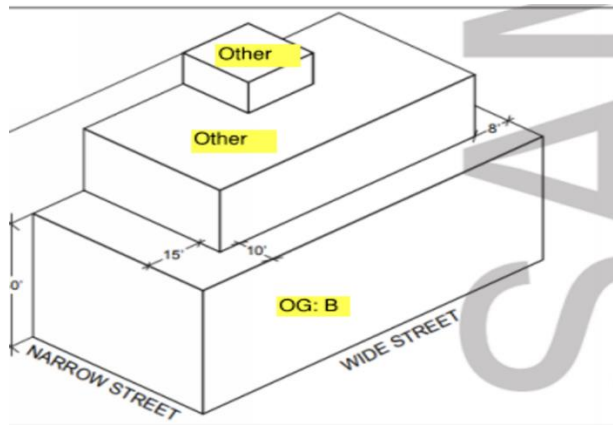
The stacking diagram graphically summarizes the occupancy group breakdown of the building and should be coordinated with information provided in the application in DOB NOW. The applicant should provide enough information to illustrate uses in the building. See below for an example. Information provided in the stacking diagram document may include:

- An occupancy use breakdown table indicating the gross floor area per occupancy per floor for the entire building. For buildings with leased spaces, the occupancies not included in the not-for-profit portion of the building can be identified as “other”. Further breakdown of these areas is not required. Floors can be entered individually or as a range when floors are identical. If entered as a range, the sum of all the floors in the range should be presented.
- As needed, an axonometric blocking diagram or floor area diagrams of the building noting the occupancies can be provided and coordinated with the table.
- A diagrammatical section may be included to clearly demonstrate occupancy breakdown if required. This may be helpful in demonstrating more than one occupancy on a floor or occupancies below grade.
- When a floor has more than one occupancy, a floor area diagram showing the boundaries of each occupancy may be provided.

Stacking Diagram Example:

Adjustment for Not-for-profit Hospitals and Healthcare Facilities (AC 28-320.9)

Location Info: Address; BBL; BIN; Application Number				
Not-for-Profit Occupancy Group Classifications (AC 320.3.1)				
Floor	B*	H	I-2	Other
Cel		5000		
001	5000			
002-003	8000		2000	
004	5000			
005-006				6000
007				500
Total	18000	5000	2000	6500
Total Not-For-Profit Gross Floor Area			25000	
Total Building Gross Floor Area				31500



ii. Not-For-Profit Status

Owners may qualify for an adjustment under two conditions- either the owner is a not-for-profit hospital or healthcare organization occupying their building, or the owner leases space to and occupied by a not-for-profit hospital or healthcare organization.

Documentation required for a not-for-profit owner

A copy of the NYC **Department of Finance “Notice of Property Value”**, which indicates that the property is either wholly or partially tax exempt, must be uploaded to DOB NOW. A DOF Statement can be retrieved at the following site: <https://www1.nyc.gov/site/finance/taxes/notice-of-property-value.page> The Department may request additional documentation as needed to support the adjustment.

Documentation required for a not-for-profit tenant

Applicants must submit a copy of the tenant’s **IRS Exemption Determination** letter as documentation of the tenant’s designation as a 501(c)(3), when an owner is seeking an adjustment for a not-for-profit healthcare tenant. Applicants must also provide documentation of the **lessor/lessee agreement**, including the term of the lease and the total area of space leased to the tenant for their exclusive use, in the form of an affidavit, signed by the owner. The current lease or a prior lease for the same space must have been effective for the entirety of calendar year 2018. If the lease is terminated and not renewed at any time between 2024 and 2034, the adjustment will be terminated for that space. The Department may request additional documentation as needed to support the adjustment.

iii. EN97A - Energy Analysis Workbook – Adjustment Program

The Department has prepared a Microsoft Excel workbook to assist applicants in preparing their submission. The workbook contains multiple worksheets that support the various parts of an application. The workbook provides backup information and is programmed to calculate certain values that will be entered into the DOB NOW system. The EN97A Energy Analysis Workbook has instructions on how to prepare for submission. The applicant needs to upload both a PDF copy of the Workbook AND a copy of the Excel workbook. The PDF copy of the EN97A Workbook should be stamped and signed by the RDP responsible for preparing the Workbook and the information contained therein. Should an applicant experience an error with the workbook programming, please reach out to the Department to bring it to our attention by e-mailing GHGEmissions@buildings.nyc.gov.

iv. Energy Analysis Report

For applications not using the default energy calculations an **Energy Analysis Report** is required. The **Energy Analysis Report** is a technical report prepared by the applicant to document how energy is being used within a building or a space. This report is uploaded in DOB NOW to support other data entered into the system for the application and should be coordinated with the **EN97A**. The report should include the following information: address; borough, block and lot; BIN; adjustment request number; applicant seal and signature.

- Supporting Documentation
 - The assumptions shall be documented in a report and should align with the corresponding building component in the EN97A workbook.
 - The title or page number of the supporting documentation should be listed in each cell corresponding to the building component in the EN97A workbook to easily correlate the modeling data with the workbook
 - The building components of the Actual Building model are verified by one of the following methods, as indicated in the EN97A, and included in the report:
 - *Estimated* – components of the building that are estimated, must be documented as such and provided any relevant sources that have informed the basis of the estimation. Examples of relevant sources would include research reports, ASHRAE Handbook of Fundamentals, etc.
 - *Reported by Site Staff* – assumptions may be derived from information provided by building operators, owners or other staff that has knowledge of the operation and construction of the building. Examples may include the schedule of operation of the building, the building’s heating/cooling setpoints.
 - *From Drawings* – modeling information that comes directly from a drawing set of the building may be submitted as documentation. This may include envelope wall assemblies, lighting fixture counts and wattages, HVAC schedules and controls.
 - *Confirmed* – any building components that have been verified by either an energy audit, by visual or measured observation, shall be documented in the supporting documents.
 - *Other* – is for any other verification method that is not one of the available methods above.

Information in the report using energy model software should also include, but is not limited to:

Energy Modeling Software Reports

- Required to be submitted with the EN97A workbook, the data on the reports should align with the values in the EN97A workbook
- The title or page number of the energy modeling report should be listed next to each component in the EN97A workbook to easily correlate the modeling data with the workbook.

v. Energy Usage Documentation

The Energy Usage Documentation may be uploaded as a single document that contains all or portions of the information below. Documentation should include the following information for the building: address; borough, block and lot; BIN; application number; applicant seal and signature. All or portions of the information below shall be provided.

Energy Calculations

Calculations are required when a meter serves multiple spaces and consumption per space is required to be assigned. The energy consumption per space can be established using an area method. Determine the energy consumption per square foot of the total space served by the meter and multiply by the square footage of the space.

For example, when a meter serves a not-for-profit healthcare occupancy and an “other” space, the energy consumption of each needs to be reported separately: Electrical meter #001 reported annual energy consumption of 1,000,000 kWh and serves a total of 6,000 square feet of the building: 5,000 square feet of the not-for-profit healthcare portion of a building and 1,000 square feet of an “other” space. To determine the energy consumption to report for the not-for-profit portion:

Annual Energy Consumption/Square foot = Consumption per square foot

1,000,000 kWh / 6,000 sqft = 166.67 kWh/sqft

Consumption per Square foot x Square foot of space = Energy consumption of space

166.67 kWh/sqft x 5,000 sqft = 833,350 kWh

The energy supplied to the not-for-profit healthcare reporting is 833,350 kWh for this meter.

Other methods for breakdown can be proposed with supporting calculations and documentation.

Meter Discrepancies

All meters for all fuel types must be reported. The data reported should match the Energy Summary submitted. If there is a discrepancy between the number of meters in the building and the number of meters being reported or between the reported data and the energy summary, a narrative describing the discrepancy must be submitted. This narrative should include the meter in question and a brief explanation for the discrepancy.

For example, some buildings may not report all their meters as some may be not applicable to its energy use or may serve more than one building.

1. Meters #005 and #008 are not being reported. The meters serve electrical vehicle charging stations. Therefore, the energy use of these meters is not applicable to the actual emissions of this building.
2. Meter #003 serves the reporting building #123 and 2 other buildings, #125 & 127. Narrative describing how the energy is assigned to each building. Provide calculations to support the energy use assignment. See Energy calculations above for requirements.

vi. Finalizing Your Application

Submission of supporting documentation in DOB NOW may be executed in the following ways: either an applicant can upload a single report containing all required technical reports and backup documentation in a single PDF, or an applicant may upload the various technical reports and backup documentation as separate PDF uploads.

The applicant should be aware that DOB NOW anticipates that the applicant will provide each required document as a required upload. If the applicant decides to combine one or more of these required documents, then they should also upload a document in place of the required document explaining where the reviewer can find the information associated with the required document(s).

CLICK 'FILE'

Note that applications in process, but not submitted will not be accepted after the respective due date for each adjustment. **Be sure to click "FILE" prior to the deadline!**

Each PDF uploaded to the DOB NOW system should include the **Adjustment Request Number**, BIN, BBL, address, and the seal and signature of the applicant. After entering the required information in DOB NOW and uploading the supporting documentation and technical reports, you may submit your application for review. **Please be reminded, an application will not be submitted to the Department until the applicant clicks on “File.”**

5. ISSUANCE OF OBJECTIONS

The submitted application will be reviewed and, if applicable, objections will be issued. **Applicants are encouraged to respond to objections in a timely manner. Responses to all objections must be uploaded in DOB NOW no later than October 31, 2023, to be resolved by December 31, 2023. Applications not resolved by December 31, 2023 may result in a denial of the application. Objections for ECC Equivalency may require annual updates to demonstrate progress and to keep applications active.** A determination on the adjustment will be issued indicating approval or denial.

APPLICANT OF RECORD RESPONSIBILITY

Objections must be resolved by the applicant of record in a timely manner.

An application for an adjustment for excess emissions due to a special circumstance will not be approved prior to receiving documentation that demonstrates that equivalency with the 2014 NYCECC has been achieved. Equivalency will be tracked as an open objection with the application until receiving acceptable documentation. The applicant will need to submit documentation demonstrating the that targeted emissions reduction for NYCECC equivalency has been achieved. This documentation should be based on actual energy use for a calendar year. The documentation can be based on energy use for CY 2024 or before. Documentation relative to equivalency may be submitted to the Department by February 15, 2025 to be resolved by April 1, 2025. If equivalency has not been resolved by April 1, 2025 the application for an adjustment may be denied.

6. ISSUANCE OF DETERMINATION

Upon approval, a letter will be sent to the applicant and owner stating the property will be granted an adjusted building emissions limit. The estimated adjusted limit will be indicated in DOB NOW. The adjusted limit will represent the emissions limit the building must comply with for calendar years 2024 – 2029. Due to the work actively under consideration by the

Advisory Board required by section 28-320.2, an estimated adjusted building emissions limit may be subject to change. Final adjusted building emissions limits will be confirmed by the Department prior to May 1, 2025.

If an adjustment application is denied, a letter will be sent to the applicant of record and the owner stating the reason for denial. As a result of denial, the 2024 emissions limits per 28-320.3.1 must be met when filing for compliance in 2025.

7. REFERENCES

A. Determining Gross Floor Area

i. Building Gross Floor Area

The Building Emissions Intensity is obtained by dividing the annual building emissions by the gross floor area (GSF) for a building, and thus, having an accurate representation of GSF is important. For the purposes of calculating building emissions intensity, the gross floor area of a building shall include the floor area of basements, cellars, mezzanines, and penthouse structures.

Gross floor area is the total number of square feet measured between the exterior surfaces of the enclosing fixed walls. It includes vent shafts, elevator shafts, flues, pipe shafts, vertical ducts, stairwells, light wells, basement space, mechanical/electrical rooms, and interior parking. It excludes unroofed courtyards and unroofed light wells. For atria, gross floor area only includes the area of atrium floors. For tenant spaces, interior demising walls should be measured to the centerline of the wall.

ii. Occupancy Gross Floor Area

Calculating area for buildings with spaces classified in more than one occupancy group is another important factor to obtain the Building Emissions Intensity. The building emissions limits vary based on occupancy classification as per section 28-320.3.1. Applicants should assign occupancy classifications to spaces in a building consistent with Chapter 3 of the Building Code. Where more than one use occurs on a single floor of a building, the boundary between uses should be the centerline of interior partitions that separate different space types. Where ancillary spaces, including but not limited to shafts, stairwells or egress paths, mechanical spaces, and incidental uses, are associated with a single occupancy, they should be assigned that occupancy class. Where ancillary spaces serve multiple

occupancy types, the ancillary space should be prorated and assigned proportionally across the different occupancy types in a building.

B. Occupancy Conversions

Occupancy classifications from Portfolio Manager should be represented by the corresponding occupancy group classification specified in the law per 28-320.3.1 using the following chart:

AC 28-320.2	Occupancy Classification	2014 Code	2008 Code	1968 Code	Prior to 1968
A	Assembly: Groups A-1, A-2, A-3, A-4 and A-5	A	A	F	
	Fixed seating for performance art or motion picture	A-1	A-1	F-1a	Public
	Food and/or drink consumption	A-2	A-2	F-4	Public
	Worship, recreation or amusement (physically active), and other assembly uses not classified elsewhere in Group A	A-3	A-3	F-3, F-1b, F-4	Public
	Indoor sporting even with spectator seating	A-4	A-4	F-1b	Public
	Participation or viewing outdoor activities	A-5	A-5	F-2	Public
B	Business: Office, professional, service-type transaction, public or civil services	B	B	E	Com.
B*	The following occupancies in Group B are to be Occupancy Group B*	B	B	E	Com.

	- Civic administrative Facility for emergency response services - Non-production laboratory - Ambulatory health care facility				
E	Educational: 5 or more persons at any time for educational purposes	E	E	G	Public
F	Factory and Industrial: Groups F-1 and F-2	F	F	D	Com.
	Moderate-hazard	F-1	F-1	D-1	Com.
	Non-combustible, non-flammable materials, or low-hazardous production	F-2	F-2	D-2	Com.
H	High Hazard: Groups H-1, H-2, H-3, H-4 and H-5	H	H	A	Com.
	Materials that represent a detonation hazard	H-1	H-1	A	Com.
	Uses present a deflagration hazard or a hazard from accelerated burning	H-2	H-2	A	Com.
	Materials that readily support combustion or present a physical hazard	H-3	H-3	A	Com.
	Materials that are health hazards	H-4	H-4	none	Com.
Semiconductor fabrication facilities using hazardous production materials (HPM) in excess of the permitted aggregate quantity	H-5	H-5	D-1	Com.	
	Institutional: Groups I-1, I-2, I-3 and I-4	I	I	H, J-2	Public

I-1	Housing persons, on a 24-hour basis, capable of self-preservation and responding to an emergency situation without physical assistance from staff	I-1	I-1	J-2	Public
I-2	Medical, surgical, nursing or custodial care, on a 24-hour basis, of 3 or more persons, who are capable of self-preservation or responding to an emergency without physical assistance from staff	I-2	I-2	H-2	Public
I-3	More than 5 persons who are detained under restraint or security reason	I-3	I-3	H-1	Public
I-4	Day care facilities, occupied by persons of any age who receive custodial care (without overnight) by individuals other than parents, guardians, or relatives in a place other than at the home	I-4	I-4	H-2	Public
M	Mercantile: Display and sale of merchandise	M	M	C	Com.
	Residential: Groups R-1, R-2 and R-3	R	R	J	Pub./Res.
R-1	Transient (up to 1 month) and student dormitories	R-1	R-1	J-1 (J-2 student dorms)	Public
R-2	More than 2 dwelling units, long term (for a month or more)	R-2	R-2	J-2	Public
	Not more than 2 dwelling units, long term (for a month or more)	R-3	R-3	J-3	Res.
S	Storage: groups S-1 and S-2	S	S	B	Com.

	Moderate-hazard storage occupancy for any flammable or combustible materials	S-1	S-1	B-1	Com.
	Low-hazard storage occupancy for non-combustible materials	S-2	S-2	B-2	Com.
U	Utility and Miscellaneous: Structures of any character, or not classified in any specific occupancy	U	U	K	Non

C. Energy Source and Fuel Type Coefficients

Energy Source or Fuel Type	Coefficient		Source
Electric Grid	0.000288962	tCO2e/kWh	28-320.3.1.1
Natural Gas	0.00005311	tCO2e/kbtu	28-320.3.1.1
Fuel Oil #2	0.00007421	tCO2e/kbtu	28-320.3.1.1
Fuel Oil #4	0.00007529	tCO2e/kbtu	28-320.3.1.1
District Steam	0.00004493	tCO2e/kbtu	28-320.3.1.1
Fuel Oil #5/6	0.00007535	tCO2e/kbtu	EPA Energy Star Portfolio Manager Technical Reference Greenhouse Gas Emissions (October 2020)
Fuel Oil #1	0.00007350	tCO2e/kbtu	EPA Energy Star Portfolio Manager Technical Reference Greenhouse Gas Emissions (October 2020)

Diesel Fuel	0.00007421	tCO2e/kbtu	EPA Energy Star Portfolio Manager Technical Reference Greenhouse Gas Emissions (October 2020)
Propane	0.00006425	tCO2e/kbtu	EPA Energy Star Portfolio Manager Technical Reference Greenhouse Gas Emissions (October 2020)
Kerosene	0.00007769	tCO2e/kbtu	EPA Energy Star Portfolio Manager Technical Reference Greenhouse Gas Emissions (October 2020)

[Greenhouse Gas Inventory and Tracking in Portfolio Manager \(energystar.gov\)](https://energystar.gov)

8. ADDITIONAL RESOURCES

- GHG Building Emissions website for updates <https://www1.nyc.gov/site/buildings/business/greenhouse-gas-emission-reporting.page>
- DOB NOW Customer support for system issues: <http://www.nyc.gov/dobnowhelp>
- Email DOB Building Emissions Unit: GHGemissions@buildings.nyc.gov
- Buildings News: <https://www1.nyc.gov/site/buildings/about/buildings-newsletter-sign-up.page>

9. APPENDIX

Conversion Factors to kBtu by Energy Source¹

Conversion Factors to kBtu by Energy Source		
Energy Source	Input Unit Options	Multiplier to get kBtu
Electricity (Grid Purchase and Onsite Renewable)	kWh (thousand Watt-hours)	3.412
Natural Gas	CCF (hundred cubic feet)	102.6
	Therms	100
Fuel Oil (No. 1)	Gallons (US)	139
Fuel Oil (No. 2)	Gallons (US)	138
Fuel Oil (No. 4)	Gallons (US)	146
Fuel Oil (No. 5 & No. 6)	Gallons (US)	150
Diesel	Gallons (US)	138
Kerosene	Gallons (US)	138
Propane	Gallons (US)	92
District Steam (125 psi)	1000 Lbs (pounds)	1,194

Source:

EPA Energy Star Technical Reference Thermal Energy Conversions (August 2015)

<https://portfoliomanager.energystar.gov/pdf/reference/Thermal%20Conversions.pdf>

¹ Fuel types that are not listed but used in the building should be reported and the applicant should provide the proposed emissions factor in tCO₂/energy unit, with explanation included in documentation