

THIS DOCUMENT HAS BEEN PREPARED AS PART OF THE IMPLEMENTATION PROJECT OF LEGAL PATHWAYS TO DEEP DECARBONIZATION (MICHAEL B. GERRARD AND JOHN C. DERNBACH, EDS. ENVIRONMENTAL LAW INSTITUTE [2019]) (LPDD). FOR BACKGROUND INFORMATION ON THE PROJECT, SEE [HTTPS://LPDD.ORG](https://lpdd.org)

AN ORDINANCE MANDATING GREEN BUILDING CONSTRUCTION

WHEREAS, the [Municipal Council/Board] has the authority to enact laws which promote the public health, safety, and general welfare of its citizens;

WHEREAS, greenhouse gas emissions contribute to adverse climate change, which is a threat to public health, safety, and general welfare of the citizens of [Municipality];¹

WHEREAS, buildings account for a significant portion of greenhouse gas emissions;

WHEREAS, it is in the best interest of the [Municipality] to promote the economic and environmental health in the [Municipality] through sustainable and environmentally friendly design and construction which reduces demand for energy and related greenhouse gas emissions;

WHEREAS, various green building certification programs have been developed to encourage environmentally sustainable buildings;

WHEREAS, green buildings constructed following standards of green building certification programs may conserve materials, energy, water and other natural resources as well as provide occupants with healthier and more productive interior environments, which can produce enormous economic benefits;

WHEREAS, green building certification programs recognize that built environments provide a wide range of opportunities to reduce greenhouse gas emissions, including strategies related to building systems, transportation, water use, construction, materials, waste management, and land cover;

WHEREAS, energy-efficient buildings generally have lower energy costs, which will improve the [Municipality's] long-term economic well-being;

WHEREAS, the adoption of the provisions set forth below will help accomplish the above objectives.

NOW, THEREFORE, be it ordained that:

¹ Municipalities are encouraged to add detail to this recital or add additional recitals that are specific to the local context. For example, a municipality could point out that it is a coastal city susceptible to sea level rise, and releasing additional greenhouse gas emissions increases temperature, which can result in rising sea levels.

Article ____ of the [Municipal] Code is created as follows:

1. Intent and Purpose

The purposes of this ordinance are to:

- a. Ensure that major new building projects and substantial rehabilitations of existing buildings are planned, designed, constructed, and managed to minimize adverse environmental impacts;
- b. Conserve natural resources and reduce toxins in new construction and substantial rehabilitation of existing buildings through selection of environmentally appropriate building materials and methods;
- c. Encourage a reduction in the use of energy in both initial construction of buildings and their daily operations;
- d. Promote environmentally sustainable and energy-efficient design and development practices; and
- e. Promote the health and quality of life of the residents, workers, and visitors of [Municipality].

2. Applicability

This ordinance shall apply to any Project in the following categories:

- a. New construction of non-residential or Multifamily Residential buildings², or additions to any of the foregoing, with more than [10,000 sf]³ of Gross Floor Area; and
- b. The alteration or rehabilitation of more than [10,000 sf] of Gross Floor Area in an existing non-residential or Multifamily Residential building, for which construction costs exceed 50% of the assessed value of the existing building, as recorded in the assessment records of the municipality as of [January 1] preceding the filing date of application for a building permit.⁴

A Project may not be phased to evade, defer, or curtail review under this ordinance. Multiple additions to the same building within a [two]⁵ period shall constitute a single Project.

Notwithstanding the foregoing, the requirements of this ordinance do not apply to Projects for which plans were accepted by the [Building Department] and the required fees were paid prior to the effective date of this ordinance.

² The ordinance is intended to include all building types other than small residential projects.

³ See discussion of size threshold in accompanying memo.

⁴ The assessed value is a readily available number that does not require the Proponent to incur the cost of obtaining an appraisal. However, many municipalities use “replacement cost” in their zoning ordinance section on restoration of non-conforming structures. Thus, they might prefer to use that term here as well.

⁵ The municipality should insert a period of time that is reasonable for its circumstances. Common time frames include a two-year or three-year period.

3. Definitions

The following words and phrases when capitalized shall have the meanings as indicated.

- a. **Green Building Compliance Official** – An employee of the [Municipal] [building/planning] department with training or experience in environmentally sustainable building practices and Green Building Rating Programs who has been designated by the [Building Commissioner/Planning Director] to administer this ordinance.⁶
- b. **Green Building Professional**– A licensed architect or engineer who holds a credential from a Green Building Rating Program indicating knowledge in environmentally sustainable development in general as well as specific Green Building Rating Systems or otherwise possesses comparable knowledge in environmentally sustainable development. In instances where a Green Building Rating Program that does not offer such a credential is being applied to meet the provisions of this ordinance, the designated Green Building Professional shall have demonstrated experience as a project architect, engineer, or third-party consultant on at least [three] projects that have been certified using the applicable Green Building Rating Program.
- c. **Green Building Rating Program** – A collection of activities and services directed by a nationally recognized organization to promote environmentally sustainable development and to recognize projects that achieve a variety of defined environmentally sustainable development objectives, such as energy performance, water efficiency, building materials, sustainable site design, and indoor environment, and includes establishment and oversight of one or more Green Building Rating Systems.
- d. **Green Building Rating System** – A specific set of design standards for environmentally sustainable performance established under a Green Building Rating Program against which a project or building design may be evaluated in accordance with the provisions of this ordinance, based on the building type or program.
- e. **Gross Floor Area (or GFA)** – The sum of the floor areas of the spaces within the building, including basements, mezzanine and intermediate-floored tiers, and penthouses with headroom height of 7.5 feet. Measurements must be taken from the exterior faces of exterior walls or from the centerline of walls separating buildings. Gross Floor Area excludes non-enclosed (or non-enclosable) roofed-over areas, such as exterior covered walkways, porches, terraces or steps, roof overhangs, and similar features. Gross Floor Area excludes air shafts, pipe trenches, chimneys and floor area dedicated to the parking and circulation of motor vehicles.⁷

⁶ This is drafted to leave the parameters of the training open so that the municipality can tailor it according to the capacity and resources available. For example, accreditation by a Green Building Rating Program is not required per the clause as drafted.

⁷ This is the definition of GFA used by the Leadership in Environmental Design (LEED) program.

- f. **Landmark** – A historic resource or landmark listed or formally determined eligible for listing on the National Register of Historic Places, designated as a state or local landmark, or listed on the state or local register of historic places.
- g. **Multifamily Residential** – A residential structure with three or more dwelling units and having four or more stories.
- h. **Project** – The erection, extension, alteration, or rehabilitation of any building or structure, or part thereof, for which a building permit is required.⁸
- i. **Project Proponent** – A person or entity having a legal or equitable interest in a Project, or the authorized agent of any such person or entity, making an application to [the Municipality] pursuant to this ordinance.⁹

4. Authorized Green Building Rating Programs, Rating Systems, and Versions

- a. **Authorized Green Building Rating Programs:** Any of the following Green Building Rating Programs may be used for compliance with this ordinance:
 - i. The Leadership in Energy and Environmental Design (“LEED”) green building rating program developed and overseen by the United States Green Building Council;
 - ii. The Green Globes rating program developed and overseen by the Green Building Initiative;
 - iii. Such other program meeting the definition of Green Building Rating Program as may be approved in writing by the Green Building Compliance Official, that provides an equivalent or greater level of environmental benefit compared to the Green Building Rating Programs authorized by Section 4.a.i and 4.a.ii above. The Green Building Compliance Official shall provide written notice to the [Municipal] clerk of the approval of any additional Green Building Rating Program and the [Municipal] clerk shall post and publish such decision in accordance with the state and/or local requirements for the publication of ordinances.¹⁰
- b. **Authorized Green Building Rating Systems:** If a Green Building Rating Program offers more than one Green Building Rating System, a Project subject to the provisions of this ordinance shall use the Green Building Rating System that is most directly applicable to that Project or building type, subject to the following limitations:¹¹

⁸ If this ordinance will be included or incorporated into an existing zoning, planning, or building code that has existing definitions for “Gross Floor Area,” “Landmark” “Project”, or “Project Proponent” then those definitions should be used instead of the ones included here.

⁹ See Footnote 8. Similar terms that could be used instead include “Applicant,” “Proponent,” and “Sponsor.”

¹⁰ Approval for additional programs should be widely publicized. It is recommended that the municipality post/publish such decisions in the same manner it would post/publish an ordinance.

¹¹ Examples of such Green Building Rating Systems within LEED include: the Building Design and Construction (BD+C), Interior Design and Construction (ID+C), Building Operations and Maintenance (O+M), Neighborhood Development (ND), Homes, and Cities systems. Within LEED BD+C, there are subcategories for

- i. The applicable Green Building Rating System must address the design and construction of buildings rather than building operations or neighborhood development; and
 - ii. In the case of rehabilitation projects, Green Building Rating Systems that only address interior design may be used only if another rating system cannot be reasonably applied.
- c. **Green Building Rating System Version:** A Project shall use the version of the applicable Green Building Rating System in effect at the time of the enactment of this ordinance, provided, however, that the Green Building Compliance Official may approve use of a newer version upon determining that the newer version provides equivalent or greater environmental benefits as the version then in effect under the ordinance. The Green Building Compliance Official shall provide written notice to the [Municipal] clerk of the approval of a newer version of a Green Building Rating System and the [Municipal] clerk shall post and publish such decision in accordance with the state and/or local requirements for the publication of ordinances.¹²

5. Requirements

- a. Any Project subject to the provisions of this ordinance shall be designed to meet the standards of one of the authorized Green Building Rating Programs listed in Section 4 above.
 - i. If the LEED Green Building Rating Program is being used, the Project shall be designed to be able to meet a minimum Gold level standard.
 - ii. If the Green Globes Rating Program is being used, the Project shall be designed to be able to meet a minimum of three Green Globes.
 - iii. If another Green Building Rating Program pursuant to Section 4.a.iii of this ordinance is being used, the Project shall be designed to be able to meet a level at least equivalent to LEED Gold or three Green Globes, as determined by the Green Building Compliance Official.
- b. Compliance with this ordinance shall be demonstrated to the Green Building Compliance Official pursuant to the procedures set forth in Section 6 below.
- c. Certification by the Green Building Rating Program shall not be required.
- d. The Project Proponent shall designate a Green Building Professional to be engaged throughout the design and development of the Project to ensure and verify that the Project is designed to meet the applicable requirements.

6. Compliance Process

- a. **Submission Requirements Prior to Obtaining Building Permit.**

the following: New Construction and Major Renovation, Core and Shell Development, Data Centers, Healthcare, Hospitality, Retail, Schools, and Warehouses.

¹² See footnote 10.

- i. Before applying for a building permit for a Project subject to this ordinance, the documentation listed below must be submitted by the Project Proponent to the Green Building Compliance Official for review and approval:
 1. Identification of the Green Building Rating Program being used for the Project.
 2. Rating System Checklist– A document that enumerates the criteria set forth in the applicable Green Building Rating System, indicating which technical and design requirements will be met in the Project design, and indicating the intended rating level of the Project.
 3. Rating System Narrative – A written description of the technical and design requirements utilized to satisfy each of the criteria that the Project intends to meet under the applicable Green Building Rating System.
 4. Green Building Professional’s Certification - A statement signed by the Green Building Professional certifying that he/she has reviewed all relevant documents, including any plans and drawings, and that to the best of his/her knowledge, the documents provided indicate that the Project is being designed to achieve the requirements of this ordinance. The Green Building Professional shall also provide his/her credentials as a Green Building Professional, in form and substance reasonably satisfactory to the Green Building Compliance Official.
- ii. Within [20 days]¹³ after receiving a complete set of documentation, the Green Building Compliance Official shall:
 1. provide written notice to the Project Proponent that the documentation sufficiently demonstrates compliance with the requirements of this ordinance and approve the submission;
 2. provide written notice to the Project Proponent that the Project does not comply with the requirements of this ordinance and specify the deficiencies; or
 3. provide written notice to the Project Proponent that the submitted documentation is insufficient to demonstrate compliance, and specify the supplemental information needed;and provide a copy of such written notice to the [Municipal] clerk and [Building Department].
- iii. The [Building Department] shall not issue a building permit for a Project subject to this ordinance until the Green Building Compliance Official has

¹³ Or such other time period as is reasonable for the Municipality. Having an outside date makes this proposed process more predictable and less burdensome for Project Proponents, and more palatable for potential opponents of the ordinance.

provided to the [Building Department] a copy of the written notice pursuant to Section 6.a.ii.1 above that the Project complies with the requirements of this ordinance.

b. Submission Requirements Prior to Obtaining Certificate of Occupancy.

- i. Before applying for a certificate of occupancy for a Project subject to this ordinance, the following must be submitted to the Green Building Compliance Official for review and approval: (i) the documentation listed in Section 6.a.i above, updated from any previous submission (if applicable) to reflect the current Project design and plans, and (ii) a statement signed by the Green Building Professional certifying that he/she has reviewed all relevant documents, including any plans and drawings, and that to the best of his/her knowledge, the documents provided indicate that the Project was built to achieve the requirements of this ordinance.
- ii. Within [20 days]¹⁴ after receiving a complete set of documentation, the Green Building Compliance Official shall:
 1. provide written notice to the Project Proponent that the documentation sufficiently demonstrates compliance with the requirements of this ordinance and approve the submission;
 2. provide written notice to the Project Proponent that the Project does not comply with the requirements of this ordinance and specify the deficiencies; or
 3. provide written notice to the Project Proponent that the submitted documentation is insufficient to demonstrate compliance and specify the supplemental information needed;

and provide a copy of such written notice to the [Municipal] clerk and [Building Department].

- iii. The [Building Department] shall not issue a certificate of occupancy for a Project subject to this ordinance until the Green Building Compliance Official has provided to the [Building Department] a copy of the written notice pursuant to Section 6.b.ii.1 above that the Project complies with the requirements of this ordinance.

7. Regulations

The [Planning Department/Building Department] may promulgate rules and regulations to administer this ordinance, as well as guidance documents and forms.

8. Waiver

¹⁴ See footnote 13.

Prior to the issuance of a building permit, the Green Building Compliance Official may waive strict compliance with the requirements of this ordinance for the following types of Projects:

- a. **Landmarks.** The Green Building Compliance Official may grant a waiver from strict compliance with the provisions of this ordinance for a Project that involves the alteration or rehabilitation of a Landmark if (i) the Project Proponent demonstrates that strict compliance with this ordinance would require alterations that conflict with standards governing the applicable historic designation programs or otherwise impair the Landmark's historic integrity and (ii) the Green Building Professional provides a written certification that the Project has incorporated all reasonable measures to achieve the minimum level required for the applicable Green Building Rating System without adverse impact on the historic characteristics of the Landmark Building.
- b. **Substantial Hardship.** The Green Building Compliance Official may grant a waiver from strict compliance with the provisions of this ordinance if (i) the Project Proponent demonstrates that unusual circumstances regarding the Project or site conditions or circumstances regarding availability of green building materials or technology create a substantial hardship for the Project to strictly comply with the requirements of this ordinance and (ii) the Green Building Professional provides a written certification that the Project has incorporated all measures necessary to comply with the requirements of this ordinance to the extent reasonably possible.

In the above situations, the Green Building Compliance Official shall, within 30 days of receipt of a written request for a waiver, issue a written decision on the waiver including reasons for any denial. If the Green Building Compliance Official finds that the Project Proponent has met the conditions for a waiver, then the Green Building Compliance Official may allow less than full compliance with the requirements of this ordinance. The Green Building Compliance Official shall require compliance to the fullest extent reasonably achievable given the circumstances and may specify the measures set out in the Green Building Rating System or any other measures required as a condition of any such waiver.

9. Appeals¹⁵

Determinations of the Green Building Compliance Official relating to this ordinance are appealable by any aggrieved person to the [appellate body] within 20 days after the written determination by the Green Building Compliance Official is furnished to the [Municipal] clerk. The [appellate body] shall review the matter de novo and may reverse, affirm, or modify, in whole or in part, any determination, and/or refer the matter back to the Green Building Compliance Official for further action as may be directed by the [appellate body].

¹⁵ If this ordinance will be incorporated into an existing zoning, planning or building code or ordinance that already has an appeals process, the municipality should use that existing process. See discussion of appeals in accompanying memo.

10. Severability

The provisions of this ordinance are severable, and if any such provision or provisions shall be held unconstitutional, invalid, or ineffective by any decision of any court of competent jurisdiction, such decision shall not impair or otherwise affect the validity or effectiveness of any other provision of this ordinance.

11. Other Applicable Regulations

Notwithstanding the provisions of this ordinance, the requirements of all other local, state and federal codes and regulations applicable to a Project must be met. If the requirements of this ordinance conflict with provisions of other local, state or federal codes or regulations, the more restrictive standards of this and the other codes shall apply.

12. Effective Date

This ordinance shall become effective sixty (60) days after the date of its enactment.¹⁶

¹⁶ A delayed effective date allows time for projects that are well along in the planning stage to avoid having to alter plans to comply with the ordinance.