

August 9, 2021

AN ORDINANCE REQUIRING A GHG PROTOCOL FOR SIGNIFICANT CITY PROJECTS

Be it ordained by the City Council of the City of Newburyport as follows:

Add new Section 5-49 as follows, with additions double-underlined, and ~~deletions double-stricken out~~:

Sec. 5-48. – GHG Protocol and Reporting Requirements.

- (a) *Purpose.* The purpose of this Section 5-48 is to promote the policy of the City of Newburyport that its buildings and structures consume the minimum amount of energy, with an ideal of “net zero energy” when measured across the City’s entire portfolio of real property, and also that the construction, maintenance, and operation of its buildings result in the minimal emission of greenhouse gases with an ideal of “net zero CO2 emissions” when measured across the City’s entire portfolio of real property.
- (b) *Definitions.* The following definitions apply under this Section 5-48.
- i. *City* shall mean the City of Newburyport, Massachusetts.
 - ii. *City Action* shall mean any formal and final authorization, appropriation, execution of a contract or other decision by the City to proceed to Commencement of a Significant City Project.
 - iii. *Carbon Dioxide (CO2) equivalent (CO2e)* shall mean the number of metric tons of CO2 emissions with the same global warming potential as one short ton of another greenhouse gas, and is calculated using Equation A-1 in 40 CFR Part 98.
 - iv. *Commencement of Construction* shall mean the initiation of on-site physical or construction work or activity. Research, design, or other work or activity necessary to evaluate a Significant City Project under this Section 5-48 shall not be considered Commencement of Construction.
 - v. *Commencement of a Significant City Project* shall mean the earliest of: (A) initiation of any preparatory phase of the Significant City Project, including any action or expenditure of funds on the financing, marketing, or development of the Significant City Project; (B) Commencement of Construction; and (C) initiation of the operational phase of the Significant City Project. Research, design, or other work or activity necessary to

evaluate a Significant City Project for purposes of this Section 5-48 shall not be considered Commencement of a Significant City Project.

- vi. *Delivered Energy* shall mean any type of energy that could be bought or sold for use as building energy , including, without limitation, electricity, steam, hot water or chilled water, natural gas, biogas, landfill gas, coal, coke, propane, petroleum and its derivatives, residual fuel oil, alcohol based fuels, wood, biomass and any other material consumed as fuel.
- vii. *Greenhouse Gas (GHG)* shall mean any of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.
- viii. *GHG Protocol* shall mean the “Revised MEPA GHG Emissions Policy and Protocol,” promulgated by the Commonwealth’s Executive Office of Energy and Environmental Affairs, and effective March 5, 2010, as it may be amended from time to time, which policy and protocol is hereby incorporated in this Section 5-48 by reference as if restated completely.
- ix. *Gross Floor Area* shall mean gross floor area as that term is defined under the Zoning Ordinance of the City of Newburyport, Massachusetts.
- x. *MEPA* shall mean the Massachusetts Environmental Policy Act (MEPA) (M.G.L. c. 30, ss. 61-62I and its implementing regulations at 301 CMR 11.00, as they may be amended from time to time.
- xi. *Net Zero GHG Emissions* shall mean a condition when anthropogenic GHG emissions are balanced globally by anthropogenic GHG removal over a specific period.
- xii. *Net Zero Energy* shall mean, on a Source Energy basis, a condition when the actual, annual Delivered Energy at a site is less than or equal to the exported On-Site Renewable Energy exported.
- xiii. *Non-City Proponent* shall mean any Person other than the City, including a designee or successor-in-interest, that undertakes a Significant City Project.
- xiv. *On-Site Renewable Energy* shall mean Renewable Energy collected and generated within the site boundary that is used for Site Energy and the excess Renewable Energy could be exported outside the site boundary, for which renewable energy certificates (RECs) are retained or retired by the owner of the site.
- xv. *Person* shall mean any individual, corporation, partnership, trust, association, or other business or non-profit organization, or any federal, state, regional, or municipal governmental, intergovernmental or other entity that is not the City.

- xvi. Renewable Energy shall mean energy resources that are naturally replenishing but flow-limited, including, without limitation, biomass, hydro, geothermal, solar, wind, ocean thermal, wave action and tidal action.
- xvii. Routine Maintenance shall mean any maintenance work or activity carried out on a regular or periodic basis in a manner that has no potential for GHG emissions or for which performance standards have been developed that avoid, minimize, or mitigate potential GHG emissions to the maximum extent practicable.
- xviii. Significant City Financial Assistance shall mean any direct or indirect financial aid to any Person provided by the City, including, but not limited to, mortgage assistance, special taxing arrangements, grants, issuance of bonds, loans, loan guarantees, debt or equity assistance, and the allocation of municipal funds, with a value exceeding five thousand dollars (\$5,000). Financial Assistance shall not be considered to include: (A) the grant of aid for medical services or personal support, such as welfare or unemployment funds, to an individual or third party on behalf of an individual; (B) pass-through of federal or state funds or issuance of bonds solely on behalf of a local economic development or financing agency, without allocation by the City; or (C) routine assistance by City staff.
- xix. Significant City Project shall mean any Significant Construction either (A) undertaken by the City or (B) or receiving Significant City Financial Assistance.
- xx. Significant Construction shall mean: (A) the erection of a building or structure having a Gross Floor Area of five thousand (5,000) or more square feet; (B) expansion or other enlargement of an existing building or structure so as to increase its Gross Floor Area by five thousand (5,000) or more square feet; (C) to establish or change the use(s) of a Gross Floor Area of five thousand (5,000) or more square feet; or (D) Substantial rehabilitation of a building or structure having, or to have after rehabilitation, a Gross Floor Area of more than ten thousand (10,000) square feet.
- xxi. Site Energy shall mean energy consumed at the site as measured at the site boundary, including heating, cooling, ventilation, domestic hot water, indoor and outdoor lighting, plug loads, process energy, elevators and conveying systems, and intra-site transportation systems.
- xxii. Source Energy shall mean Site Energy plus the energy consumed in the extraction, processing and transport of primary fuels, such as coal, oil and natural gas, energy losses in thermal combustion in power generation plants, and energy losses in transmission and distribution to the site.
- xxiii. Substantial Rehabilitation shall mean alterations, extension, reconstruction, or repairs to a building or structure within any period of twelve (12) months that together cost more than fifty percent (50%) of the physical value of the building or structure, where physical value is based upon the assessed value by the City Assessor as of the January 1

preceding the date of determining the applicability to a Significant City Project of this Section 5-48.

- (c) Applicability of GHG Protocol. Regardless of whether a Significant City Project is subject to review under MEPA, and unless an exemption applies under subsection (b)(iii) below, every Significant City Project shall be subject to the GHG Protocol as if an Environmental Impact Report (EIR) were required under MEPA, and as such GHG Protocol is modified under this Section 5-48.
- i. Generally. The general requirement of this Section 5-48 is that the City or the Non-City Proponent of a Significant City Project quantify the potential annual GHG emissions from a proposed Significant City Project according to the quantification protocol outlined in the GHG Protocol, and report the results of that analysis in a document called a "GHG Report" to be submitted to the Mayor with a copy filed with the City Clerk, who, upon receipt, shall distribute said report to all members of the City Council. GHG emissions shall be expressed in short tons of CO₂e.
- ii. GHG Report. The GHG Report shall include a calculation of the Significant City Project's baseline GHG emissions in accordance with the GHG Protocol, and estimated GHG emissions associated with the preferred alternative, as well as outline and commit to a series of mitigation measures that will help to reduce GHG emissions from the proposed Significant City Project. To demonstrate the efficacy of the mitigation measures, the GHG Report shall include a measurement of GHG emissions reductions and energy savings estimated to be achieved by the 's preferred alternative against the Significant City Project baseline, and also discuss the rationale and GHG emissions reduction potential of mitigation measures that were not selected for the preferred alternative. In summary, the GHG Report is intended to include a three-step analysis: (A) identify a project baseline; (B) calculate estimated GHG emissions from the project baseline condition; and (C) calculate estimated emissions reductions based on mitigation measures by comparing project alternatives to the baseline. In addition, the GHG Report shall describe: (I) all feasible measures to be taken by the City or the Non-City Proponent of a Significant City Project receiving Significant City Financial Assistance to avoid GHG emissions, or, to the extent GHG emissions cannot be avoided, to minimize and mitigate GHG emissions to the maximum extent practicable; (II) a Person responsible for funding and implementing mitigation measures; and (III) the anticipated implementation schedule that will ensure that such described mitigation measures shall be implemented prior to or when appropriate in relation to GHG emissions.
- iii. Exemptions. Notwithstanding anything in this Section 5-48 to the contrary, the GHG Protocol shall not apply, and no GHG Report shall be required for (A) Routine Maintenance; and (B) those Significant City Projects for which the City's Planning Director has issued a written determination that little or no GHG emissions are reasonably expected.

- (d) Design and Engineering Contracts and RFPs. Every design or engineering contract entered into by the City, as well as any Request for Proposals (RFP) issued by the City, for a Significant City Project shall require the design or engineering contractor, or a subcontractor associated with them, to demonstrate experience within the past three (3) calendar years designing buildings or structures to Net Zero Energy and/or Net Zero GHG Emissions standards, and such experience shall be included among the criteria used by the City to award any such contract or select a respondent under any such RFP.

Councillor Jared J. Eigerman