

Executive Office of Energy & Environmental Affairs

MEPA Greenhouse Gas Policy and Protocol

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Massachusetts Environmental Policy Act

MEPA: MGL c. 30 § 61-62 and regulations, 301 CMR 11.00

- Coordinated state agency and public review of projects
- MEPA requires proponents to:
 - Study the environmental consequences of their actions
 - Take all feasible measures to avoid, minimize, and mitigate Damage to the Environment
- EIR is the primary mechanism for information collection and review, and development of mitigation measures
- MEPA review is not a permitting process



MEPA Greenhouse Gas Policy & Protocol

- EEA has broadened “Damage to the Environment” to include GHG emissions from certain projects subject to MEPA review
- Policy requires that Proponent identify and quantify GHG emissions from proposed projects and identify measures to avoid, minimize and mitigate emissions



Development of Policy & Protocol

- April 2007 Secretary convened Technical Advisory Committee to work with EEA/MEPA staff
- EEA/MEPA met with stakeholders from real estate, construction and environmental community
- Public comment period on Draft Policy/Protocol
- Final Policy & Protocol issued October 9, 2007. All new projects submitted to MEPA after October 31st must comply with policy if applicable.



Applicability

- Projects are subject to the Policy if EIR is required *and*:
 - The Commonwealth or a state agency is the Proponent;
 - The Commonwealth or state agency is providing financial assistance;
 - The project is privately funded but requires a DEP Air Quality Permit; or,
 - The project is privately funded but requires an Access Permit from MassHighway.



MEPA GHG Policy & Protocol Overview

- Proponents must quantify GHG emissions from baseline project and alternatives
- Proponents must commit to and quantify impact of emissions-reduction mitigation measures
- No specific target for GHG reductions
- Commitments to emissions-reduction mitigation to be enforceable through Section 61 Findings
- At current time, analysis will focus primarily on CO₂



Emissions Analysis

- Direct emissions from stationary sources i.e., boilers, heaters, combustion turbines, generators, etc.
- Indirect emissions from energy consumption i.e., purchase and consumption of electricity, steam, or cooling
- Indirect emissions from transportation i.e., travel by employees, vendors, customers and others
- Not required to analyze construction period emissions
- More info available at WRI/WBCSD Greenhouse Gas Protocol Initiative www.ghgprotocol.org



Emissions Quantification – Buildings and Energy Consumption

- Baseline for energy use: calculate energy use based on a “code-compliant” buildings
- Use energy modeling software (EQUEST, Energy-10, Visual DOE, etc.) to quantify projected energy use from stationary sources and energy consumption
- Use emission factors from Energy Information Administration and ISO-NE to calculate CO₂



Emissions Quantification – Transportation

- Baseline condition for transportation: “Build Without Mitigation” alternative developed using standard EEA/EOT TIAS methodology and ITE trip generation rates
- Traffic study area identified for mesoscale analysis, Access Permit application or by MEPA
- Calculate annual VMT for project’s net new trips (employee, customer, delivery)
- Use EPA MOBILE 6.2 CO₂ emission factors to calculate emissions



Emissions Reduction Mitigation

Calculate and compare emissions associated with:

1. Code-compliant baseline (combined for stationary sources, energy consumption and transportation)
 2. Preferred alternative
 3. Project alternatives with **greater** GHG emissions-reduction mitigation than the Preferred alternative
- Use energy modeling software to evaluate mitigation measures for direct and indirect emissions from buildings and energy use
 - Use EPA COMMUTER, EPA Work Trip Reduction Model and EOT CMAQ Worksheets to evaluate TDM mitigation



Offsets & Opt Outs

- Direct mitigation prioritized over off-site measures
- Offsets should have local or regional benefits, must be verifiable and enforceable
- MEPA will consider opt out requests on a case-by-case basis; Proponents must commit in advance to highly exceptional measures



Additional Information

MEPA Website: <http://mass.gov/envir/mepa>

- General MEPA Info
- GHG Policy & Protocol
- Response to Comments on Policy & Protocol

Questions about Policy & Protocol

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