

Checklists for Energy Compliance

I. Application

a. Basic Requirements for Applicants Other than Transporters & Delivery

1. Identification of potential energy-use reduction opportunities (such as natural lighting and energy efficiency measures), and a plan for implementation of such opportunities;
 - Description of how the ME/MTC will monitor energy consumption and make adjustments to operations based on energy usage data;
 - Procedures for identifying energy savings opportunities as part of any facility upgrades, renovations, or expansions; and
 - Procedures for identifying energy savings opportunities when equipment fails and needs to be replaced.
2. Consideration of opportunities for renewable energy generation, including, where applicable, submission of building plans showing where energy generators could be placed on the site, and an explanation of why the identified opportunities were not pursued, if applicable;
 - Description of how the ME/MTC will make energy supply decisions and regularly evaluate renewable options;
 - Procedures for identifying renewable or alternative energy opportunities as part of any facility upgrades, renovations, or expansions; and
 - Procedures for identifying renewable or alternative energy opportunities when equipment fails and needs to be replaced.
3. Strategies to reduce electric demand (such as lighting schedules, active load management, and energy storage); and
 - Description of how the ME/MTC will monitor energy demand and make adjustments to operations based on data; and
 - Procedures for participation in load curtailment, energy storage, or other active demand management programs (as applicable).



4. Engagement with energy efficiency programs offered pursuant to M.G.L. c. 25, § 21, or through municipal lighting plants.
 - Description of how the applicant will incorporate regular engagement with energy efficiency programs (account representative, vendors, etc.) to ensure awareness of new opportunities and incentives.

b. Basic Requirements for Transporters & Delivery

- Applicant must describe how it will make fleet decisions and affirm that it will regularly evaluate alternative fuel vehicle options.

c. Additional Requirements for Cultivation Facilities

- How the cultivator will ensure on a regular basis that equipment is maintained, calibrated, and operating properly, including maintaining operations manuals and operating procedures for all major energy-using equipment – including, but not limited to, horticultural lighting, HVAC systems, dehumidification systems.

II. Architectural Review

a. Basic Requirements for Applicants Other than Transporter & Delivery

1. Identification of potential energy-use reduction opportunities (such as natural lighting and energy efficiency measures), and a plan for implementation of such opportunities;
 - Information demonstrating actual consideration of energy reduction opportunities, including a list of energy reduction opportunities that were considered.
 - Information about whether opportunities are being implemented, will be implemented at a later date, or are not planned to be implemented.
 - Summary of information that was considered to make the decision (i.e. costs, available incentives, and bill savings). NOTE: submission of a Mass Save® or MLP audit report or rebate applications is sufficient to demonstrate compliance.



2. Consideration of opportunities for renewable energy generation, including, where applicable, submission of building plans showing where energy generators could be placed on the site, and an explanation of why the identified opportunities were not pursued, if applicable;
 - Information should be submitted to demonstrate actual consideration of renewable energy generation opportunities, including a list of renewable or alternative energy reduction opportunities that were considered.
 - Information about whether opportunities are being implemented; will be implemented at a later date; or are not planned to be implemented.
 - A summary of information that was considered to make a decision (i.e. costs, available incentives, and bill savings).
3. Strategies to reduce electric demand (such as lighting schedules, active load management, and energy storage);
 - Information should be submitted to demonstrate actual consideration of demand reduction opportunities.
 - Information about whether opportunities are being implemented, will be implemented at a later date, or not planning to be implemented.
 - A summary of information that was considered to make a decision (i.e. costs, available incentives, and bill savings). NOTE: submission of a Mass Save® or MLP audit report or rebate applications is sufficient to demonstrate compliance.
4. Engagement with energy efficiency programs offered pursuant to M.G.L. c. 25, § 21, or through municipal lighting plants.
 - Information should be submitted to demonstrate actual engagement with energy efficiency (Mass Save® or MLP) programs and any financial incentives received. NOTE: submission of a Mass Save® or MLP audit report or rebate applications is sufficient to demonstrate compliance.

b. Basic Requirements for Transporter & Delivery

- Narrative describing the process the Transporter or Delivery operation used to select vehicles to be used in operations.
- If alternative fuel vehicles are not being used, detailed explanation of why other vehicle fuel sources were selected.



- A description of any other energy and water conservation strategies employed at the physical facility for the Transporter and Delivery operation (e.g. garage, dispatch) should also be included.

c. Additional Requirements for Cultivation Facilities: Energy Compliance & Energy Compliance Exemption Letters

1. Who needs to sign the letter?

For Indoor Marijuana Cultivators, Medical Marijuana Treatment Centers – the letter must be signed by a:

- Massachusetts Licensed Professional Engineer; or
- Massachusetts Licensed Registered Architect.

For Microbusinesses or Craft Marijuana Cooperatives with a cultivation location sized as Tier 1 or Tier 2, or such other Marijuana Cultivators meeting the requirements of 935 CMR 500.850 for a waiver:

The letter must be signed by a:

- Massachusetts Licensed Professional Engineer;
- Massachusetts Licensed Registered Architect;
- Certified Energy Auditor certified by the Association of Energy Engineers; or
- Certified Energy Manager certified by the Association of Energy Engineers.

Please note: The HVAC & dehumidification systems portion of the letter must be separately completed and signed by a:

- Massachusetts Licensed Mechanical Engineer; or
- Professional Engineer with license that covers mechanical engineering.

2. What needs to be in the letter?

Energy Compliance Letters or Energy Compliance Exemption Letters must include, at a minimum, the information required below.



- Letter Demonstrating HLPD Compliance

The letter must include the following information:

- *Building Envelope*
 - Narrative confirming compliance with 935 CMR 500.120(11)(a) or 935 CMR 501.120(11)(a), as applicable; and
 - The output from COMcheck™ software used to show building envelope compliance with State Building Code, 780 CMR.
- *HLPD Lighting (you should select either HLPD or HQPL, not both)*
 - If the applicant chooses the HLPD compliance path, the letter must include the calculations that show compliance with the HLPD requirements;
 - Narrative explanation of how the facility complies with 935 CMR 500.120(11)(b) or 501.120(12)(b), supported by copies of the facility lighting schedule, square footage of canopy, description of horticultural lighting equipment, number, type and wattage of all HLE;
 - Cutsheets for all HLE to be submitted as part of the Architectural Review;
 - Detailed identification of the stamped plans showing the layout of all HLE, which means any lighting equipment (e.g. fixtures, bulbs, ballasts, controls, etc.) that uses energy for the cultivation of plants, at any stage of growth (e.g. germination, cloning/mother plants, propagation, vegetation, flowering, and harvest), such plans must be available immediately upon inspection and two copies of the plans must be available for immediate surrender upon request;
 - Detailed identification of the stamped plans showing the areas considered as HLSF, such plans must be available immediately upon inspection and two copies of the plans must be available for immediate surrender upon request;
 - Description of eye safety plan that includes the following:
 - Safety protocols related to eye safety for those exposed to horticultural lighting;



- Communication plan for how eye safety protocols will be communicated to employees;
 - Description of how protective eyewear will be provided for anyone coming in to contact with active horticultural lights;
 - Description of signage that will be used to remind workers of eye safety; and
 - Affirmation that the safety protocols will be reviewed and updated by the Marijuana Cultivator or MTC on an annual basis.
- *HQPL Lighting (you should select either HLPD or HQPL, not both)*
 - Narrative explanation of how the facility complies with 935 CMR 500.120(11)(b) or 501.120(12)(b), supported by copies of the facility lighting schedule, square footage of canopy, description of horticultural lighting equipment, number, type and wattage of all HLE;
 - Cutsheets for all HLE to be submitted as part of the Architectural Review;
 - Description of eye safety plan that includes the following:
 - Safety protocols related to eye safety for those exposed to horticultural lighting;
 - Communication plan for how eye safety protocols will be communicated to employees;
 - Description of how protective eyewear will be provided for anyone coming in to contact with active horticultural lights;
 - Description of signage that will be used to remind workers of eye safety; and
 - Affirmation that the safety protocols will be reviewed and updated by the Marijuana Cultivator or MTC on an annual basis.



- *HVAC & Dehumidification Systems*
 - Certification from a MA Licensed Mechanical Engineer that the HVAC and dehumidification systems meet Massachusetts building code, and that HVAC and dehumidification equipment have been evaluated and sized for the loads of the facility;
 - Total of TR, thousands of BTUs per hour (MBH), and a listing of all HVAC equipment to be installed, supported by equipment data sheets;
 - Total of TD, and a listing of all dehumidification equipment to be installed, supported by equipment data sheets;
 - Details about energy recovery equipment installed as part of the ventilation system; and
 - A listing of all odor mitigation equipment to be installed, supported by equipment data sheets.
- Letter Demonstrating Compliance Exemption
 - *Eligible Technologies*
 - Renewable Generation Unit as defined by 225 CMR 14:
 - Solar photovoltaic or solar thermal electric energy;
 - Wind energy;
 - Ocean thermal, wave or tidal energy;
 - Fuel cells using eligible RPS Class I renewable fuel;
 - Landfill methane gas;
 - Hydroelectric;
 - Low-emission, Advanced Biomass Power Conversion Technologies using Eligible Biomass Fuel;
 - Marine or hydrokinetic energy; or
 - Geothermal energy.



- Renewable Thermal Generation Unit as defined by 225 CMR 16:
 - Air-Source Heat Pump;
 - Ground Source Heat Pump;
 - Deep Geothermal Heat Exchange;
 - Solar Thermal;
 - Woody Biomass;
 - Biogas;
 - Liquid Biofuels; or
 - Compost Heat Exchange System.

○ *Narrative Contents of Letter*

- Description of clean or renewable energy system, including an attestation that system meets eligibility requirements above. This requirement can be satisfied by providing an RPS or APS Statement of Qualification approved by the Department of Energy Resources.
- Energy usage calculations for the facility, supported by building plans, energy models, and energy model outputs, including inputs and outputs by end use;
- Clean or renewable energy generation calculations for the facility, supported by building plans and energy models, including inputs and outputs by end use; and
- Written plan on how RECs or AECs will be generated and retired on at least an annual basis. Note that the option of retiring RECs and AECs is available only to demonstrate the portion of energy usage *not* generated for onsite use (maximum of 20% of total onsite energy usage).
- Description of eye safety plan that includes the following:
 - Safety protocols related to eye safety for those exposed to horticultural lighting;



- Communication plan for how eye safety protocols will be communicated to employees;
 - Description of how protective eyewear will be provided for anyone coming in to contact with active horticultural lights;
 - Description of signage that will be used to remind workers of eye safety; and
 - Affirmation that the safety protocols will be reviewed and updated by the Marijuana Cultivator or MTC on an annual basis.
- *HVAC & Dehumidification Systems*
 - Certification from a MA Licensed Mechanical Engineer that the HVAC and dehumidification systems meet Massachusetts building code, and that HVAC and dehumidification equipment have been evaluated and sized for the loads of the facility;
 - Total of TR, thousands of BTUs per hour (MBH), and a listing of all HVAC equipment to be installed, supported by equipment data sheets;
 - Total of TD, and a listing of all dehumidification equipment to be installed, supported by equipment data sheets;
 - Details about energy recovery equipment installed as part of the ventilation system; and
 - A listing of all odor mitigation equipment to be installed, supported by equipment data sheets.

d. Additional Requirements for Cultivation Facilities: Third-Party Safety Certification

- Third-party safety certification for lighting products by an OSHA, NRTL, or SCC-recognized body, which shall certify that the products meet a set of safety requirements and standards deemed applicable to horticultural lighting products by that safety organization.



III. Renewal

- Cannabis PowerScore
- Update Energy Compliance Letter or Energy Compliance Exemption Letter

