

Massachusetts Solar Canopy Working Group

Friday, May 9, 2025 | 1:00 – 3:00 p.m.

Via Teams and in person at 100 Cambridge Street, Boston

Working Group Members Present:

- Cobi Frongillo, Deputy Director, Renewable & Alternative Energy, DOER
- Matthew Connolly, Co-Chair, Environment and Energy, Nutter
- Kevin Brousseau, Secretary-Treasurer, Massachusetts AFL-CIO
- Amy Boyd Rabin, VP, Policy & Regulatory Affairs, ELM
- Gregory Beeman, President, Associated Builders and Contractors of Massachusetts
- Brian Rice, Director, Customer Solar Programs, Eversource Energy
- Mike Ossing, Chair, Energy and Environment Policy Committee, MMA
- Jessica Robertson, Director, Policy and Business Development, New England, New Leaf
- Heather Takle, President & CEO, PowerOptions
- Valessa Souter-Kline, SEIA
- Sonia Patano, SVP, Property Management, GID

Additional Attendees and Presenters:

- Mark Sandeen, Lexington MA Selectboard Member & President of Mass Solar
- Kerry Judge, DOER
- Josie Ahlberg, Legislative Aide, Environmental Policy, MMA

Cobi Frongillo, Valessa Souter-Kline, and Jessica Robertson attended in person. All other meeting attendees participated remotely.

Agenda and Minutes

1) Call to Order

Chair Cobi Frongillo called the meeting to order at 1:05 p.m., welcomed attendees, and reviewed the agenda.

2) Presentation: Lexington Projects

Mark Sandeen presented two municipal solar canopy projects in Lexington:

- *Police Station Canopy*: Located in a historic district, the project required multiple RFPs and Historic Commission approval. The canopy was designed to resemble a 19th-century train station. Financing was achieved through municipal bonding, justified by a strong cash flow outlook enabled by energy storage and demand savings. Storage participation in ConnectedSolutions helped make the project cash-positive.

- *Lexington High School Net-Zero Project*: A 3.9 MW system combining rooftop and long-span canopies. The school will be all-electric, and paired solar and storage will reduce peak demand from ~2 MW to ~200 kW. Energy savings and revenue from storage contribute to an expected \$91 million in positive cash flow compared to conventional heating. Microgrid capabilities are being designed into the system.

Group members asked further questions about the projects and general reflections on solar canopy development in Massachusetts.

- *Barriers* include prolonged municipal approval processes, site-specific permitting, and net metering caps.
- *Best practices* include starting with a small project to build public support; framing benefits in financial terms; using prevailing wage; and engaging local firms.
- *Policy suggestions* include supporting state revolving funds, considering microgrid modeling assistance, clarifying interconnection rules for storage, and considering standardized model programs for schools.
- *Other reflections*:
 - Project validation required coordination between multiple engineering and financial modeling firms.
 - The town used an EV school bus campaign to gain broader support at town meeting.
 - Storage is essential to both projects, contributing to peak shaving and interconnection management.

3) Brainstorming Recommendations

Chair Frongillo led the group in a structured prioritization exercise using virtual sticky notes, refining and expanding draft recommendations in three key areas:

Financing

- Provide grants for innovative projects and feasibility studies.
- Revise SMART incentives to support all canopy types.
- Adjust TOU rates and support demand flexibility, including incorporating demand value of canopy + storage as non-wires/pipes alternatives for projects not sited behind load.
- Authorize early PSQs with guardrails (e.g., only for PE projects).
- Consider a state-level revolving fund for municipalities with limited borrowing capacity.
- Encourage BTM canopies and align with EV charging and TOU policy.

Interconnection & Permitting

- Create a model bylaw for canopy projects.
- Support DOER's municipal permit streamlining work.
- Require standardized utility reviews of access rights.

- Develop standard easement templates with financeable site control.
- Update SMART and IX timelines to align with real-world project schedules.
- Task the IIRG with developing flexible interconnection standards.
- Provide guidance on fire vehicle clearance standards (e.g., 16-foot minimums).
- Standardize permitting criteria for storage interconnection impacts and costs.

Other Ideas

- Study and publish co-benefits of canopies (e.g., shading, resilience, grid support).
- Create microgrid design guides with case studies.
- Highlight success stories and engage academic partners.
- Reassess 10 MW net metering caps; consider municipal capacity trading.
- Explore statutory canopy requirements for large parking lots (with caution).

Group members brainstormed further recommendations and reflections. Canopies often raise siting concerns and trigger more community feedback. Storage modeling tools and technical assistance would help municipalities. Fire departments have growing influence on canopy specs (e.g., height). Some permitting issues may require small fees to support standardized processes.

4) Presentation: Maynard High School

Chair Frongillo shared a slide deck on the Maynard High School solar project, prepared by Maynard Town Administrator Greg Johnson. Developed with Solect and Beacon Integrated Solutions through PowerOptions, the system includes both rooftop (250 kW AC) and canopy (180 kW AC) components. It covers 70% of the site's electricity needs and is expected to save \$895,000 over its lifetime. The project went through a comprehensive town-level approval process and serves as a model for future town facilities (e.g., new elementary school, town hall, fire station).

5) Discussion & Next Steps

Chair Frongillo will compile the group's draft recommendations and circulate them for feedback within the next week. The working group will target finalizing a draft report by the end of May. A final meeting is expected to occur in June after DOER and EEA review. Select external case studies may be included in the report to highlight innovative approaches.

6) Adjournment

Chair Frongillo adjourned the meeting at 2:58 p.m.

Documents and Exhibits Presented at the Meeting

- [Lexington Canopy Project Slides](#)
- [Maynard Canopy Project Slides](#)
- [Wired article on balcony solar panels](#)

- [Yale study on Connecticut's solar parking canopy potential](#)