What conservationists need to know about pending state regulations for energy facility siting and permitting

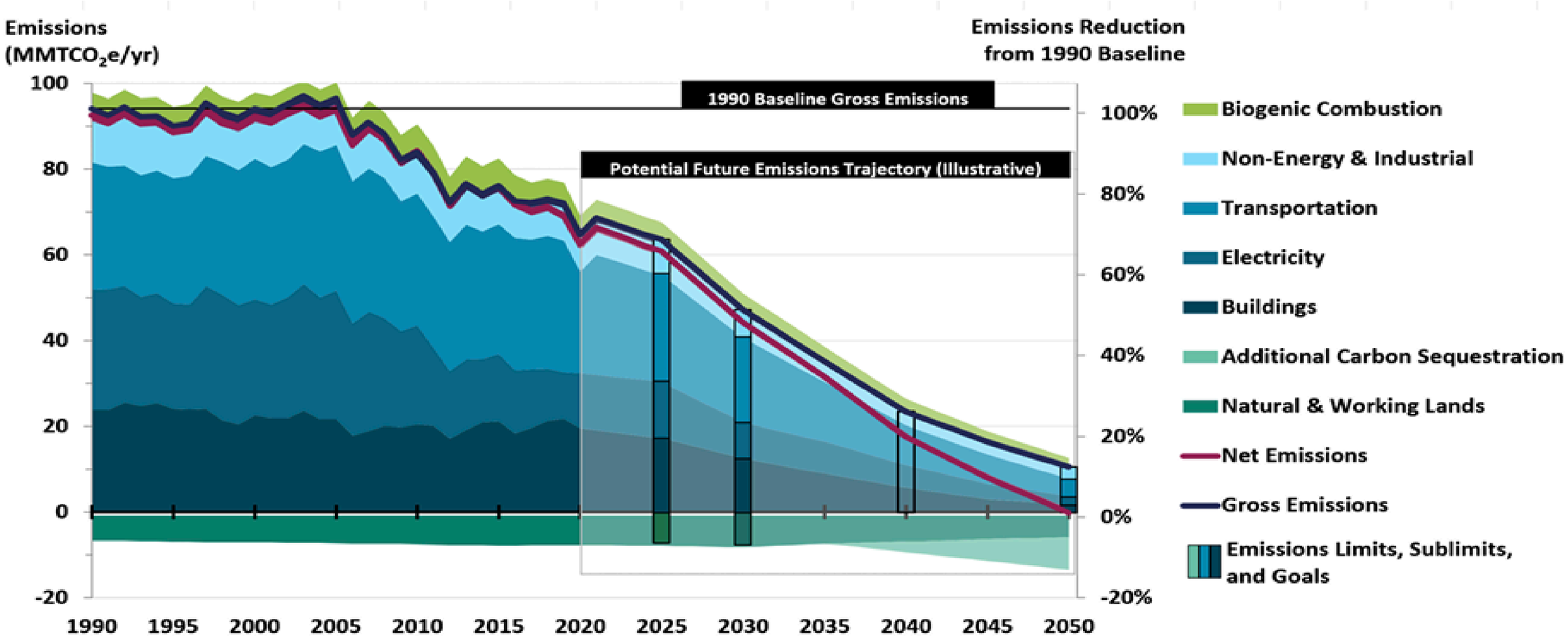
June 20, 2025
MLTC Conservation Partners Meeting
Concord, MA

The Nature Conservancy
Protecting nature. Preserving life.™

Mass Audubon

MA progress on climate goals: Better, but next decade is *absolutely critical. Both clean energy AND nature must play a big part.*

FIGURE 3-5. PAST EMISSIONS THROUGH 2020, EMISSIONS LIMITS AND SUBLIMITS, AND ILLUSTRATIVE POTENTIAL EMISSIONS TRAJECTORY THROUGH 2050



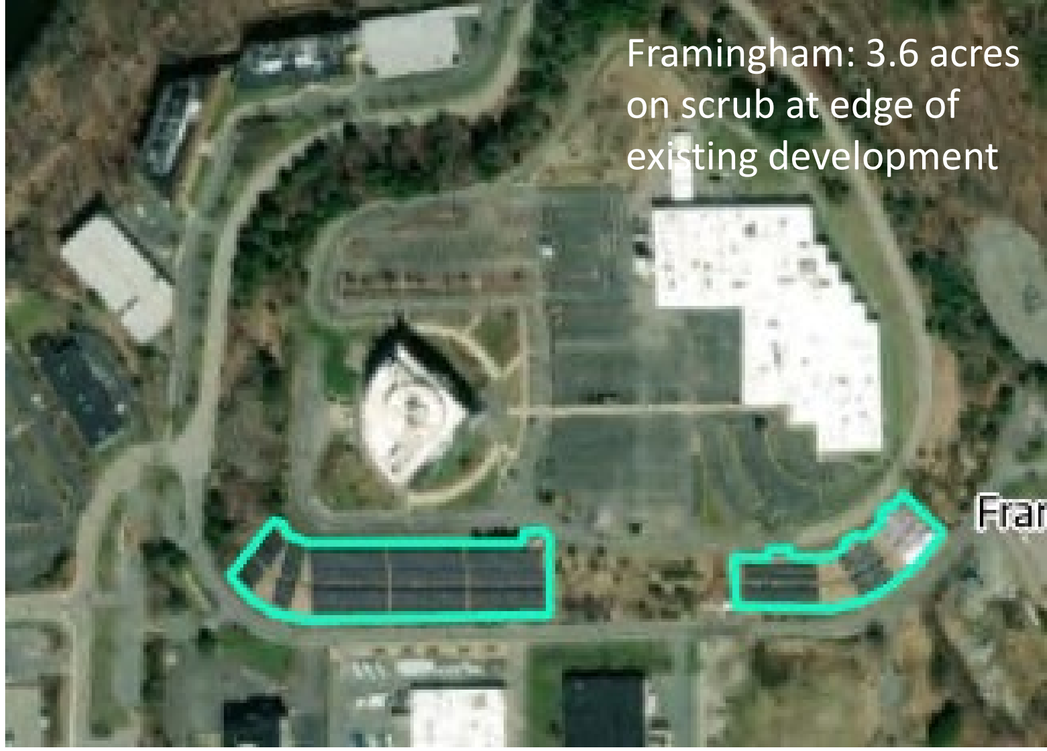
Source: MA 2050 Clean Energy and Climate Plan (2022).

MA solar incentive programs encourage distributed solar on buildings but…

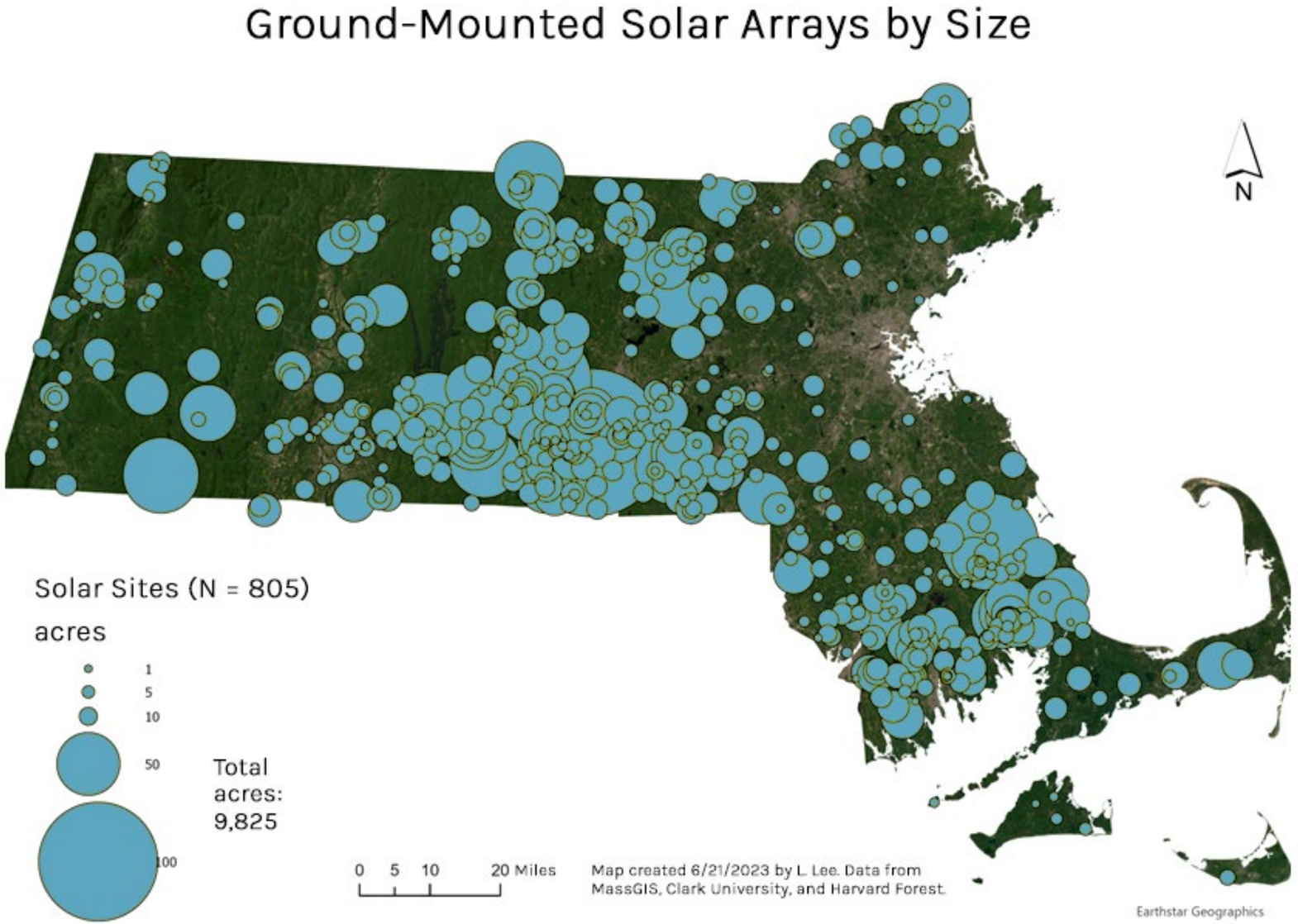
- Massachusetts is a national leader in equitable community solar and low-impact solar siting:
    - #1 in Landfill solar projects
    - #2 in Distributed solar per capita
    - #3 in Community solar per capita

- MA's solar incentive program (SMART) continues to support deployment of urban infill, community solar, and distributed solar projects

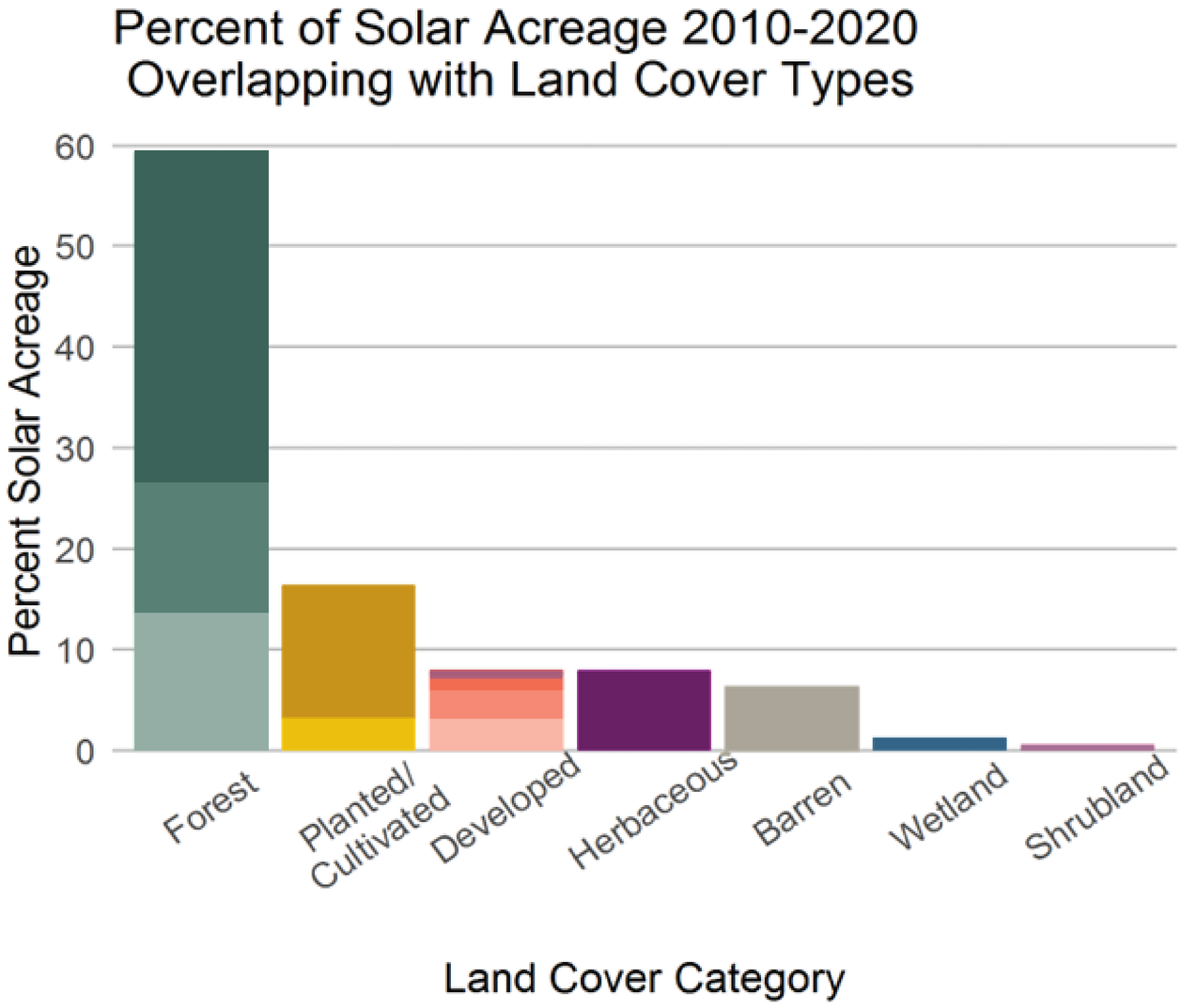
- *Inflation Reduction Act* incentives may be phased out
    - Residential solar 30% tax credit phased out ASAP
    - Incentives for larger utility-scale solar may last thru 2029



…but also large-scale solar projects which have had no guardrails on *where* they're being sited.



Location Matters: Since 2010, large-scale solar has consistently been sited on many high-value forests and farms…



- Harvard Forest and Clark Univ. estimate that 60% of ground-mount solar installed in MA between 2010 & 2020 impacted forests
- >3,500 acres of forest converted to solar as of 2020, releasing carbon equivalent of annual GHG emissions of 112,000 cars (>510,000 tons CO2e)

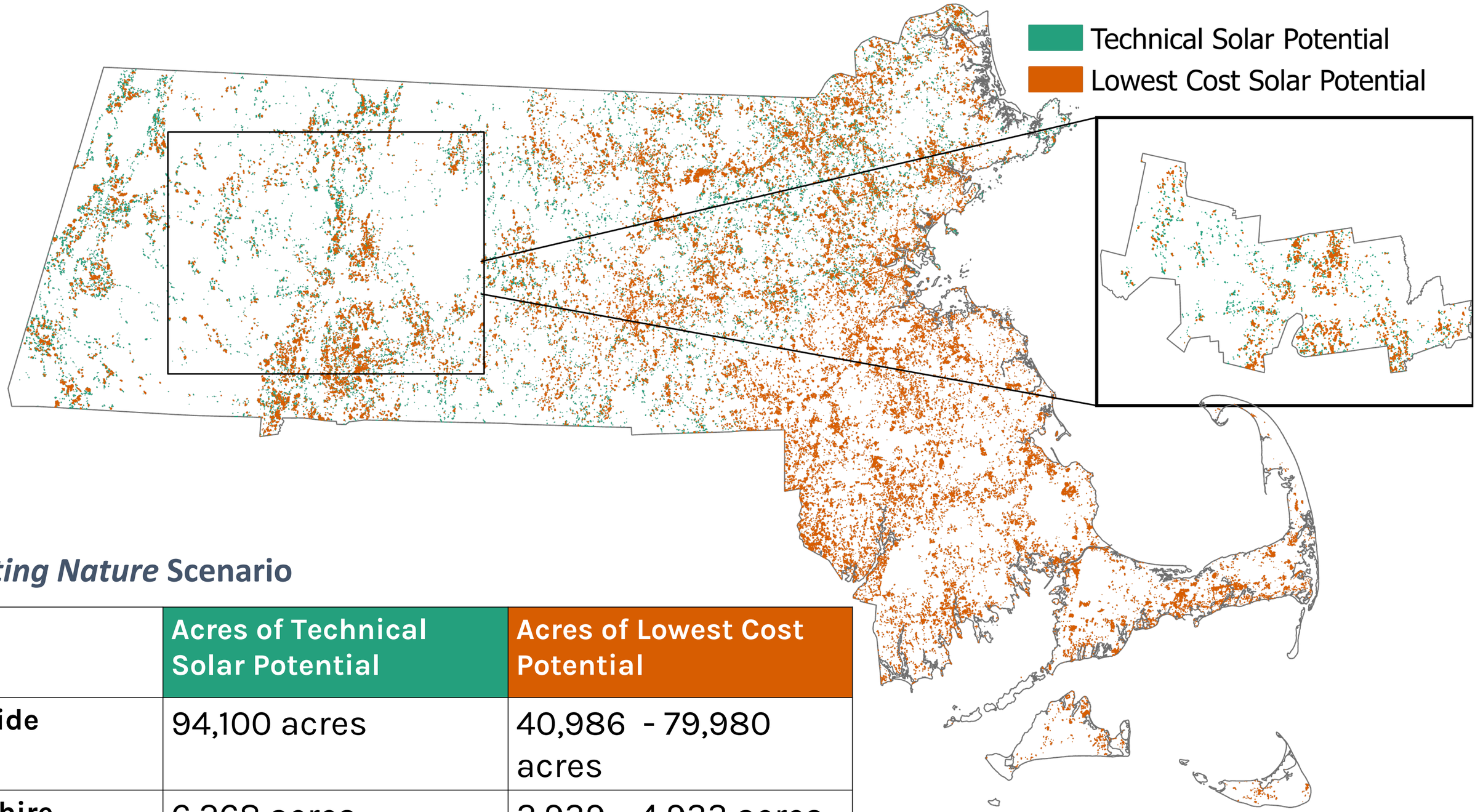
Massachusetts has significant additional solar potential on rooftops and parking lots

MA should aim to capture 50% of statewide technical potential for solar:

~21 GW of rooftop solar potential

~10 GW of canopy solar potential

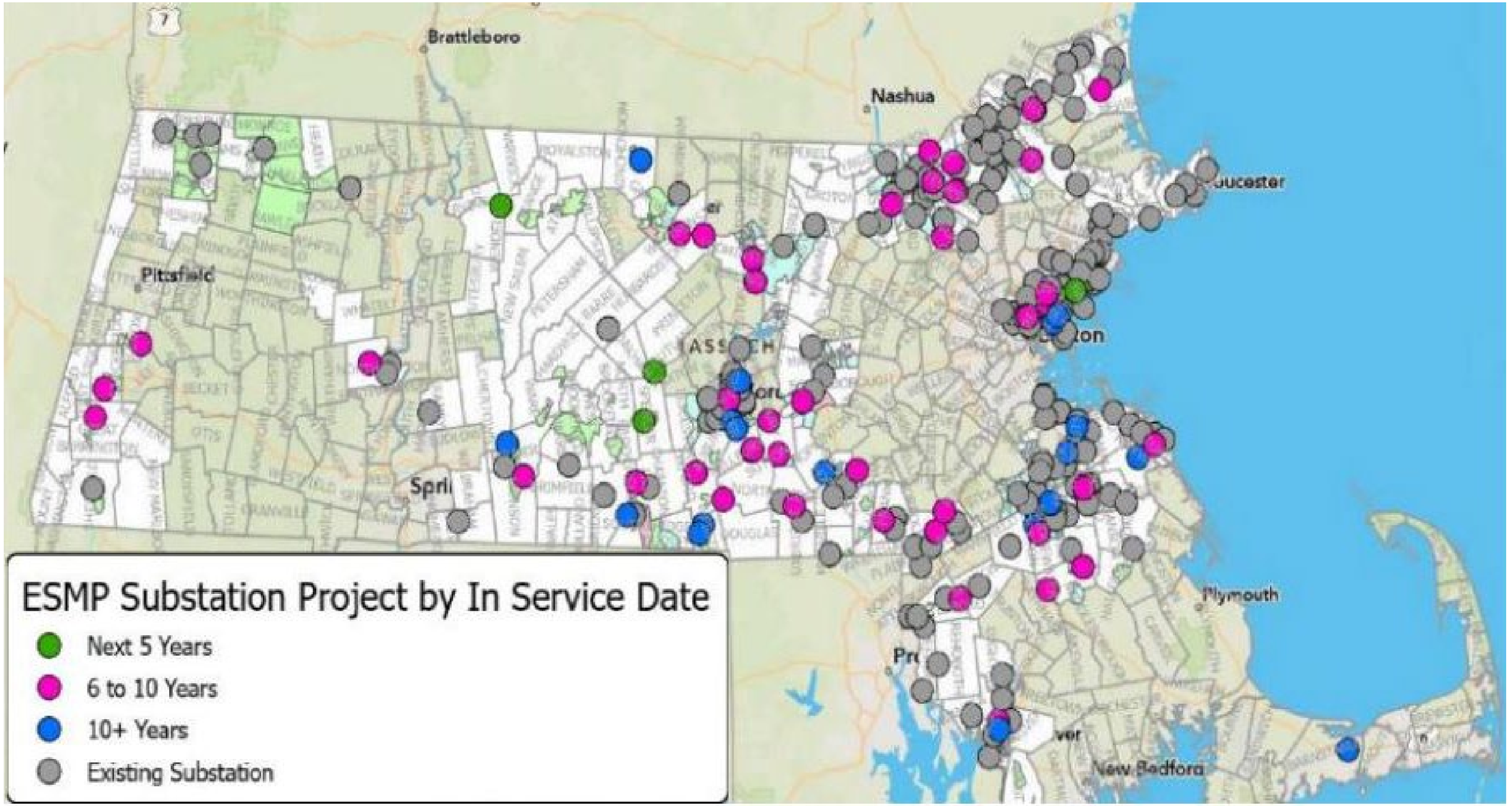
Data sources:
Roofprints - MassGIS 2021,
Parking lots - Dr. Brad Compton, UMass



Protecting Nature Scenario

	Acres of Technical Solar Potential	Acres of Lowest Cost Potential
Statewide	94,100 acres	40,986 - 79,980 acres
Hampshire County	6,268 acres	2,939 – 4,933 acres

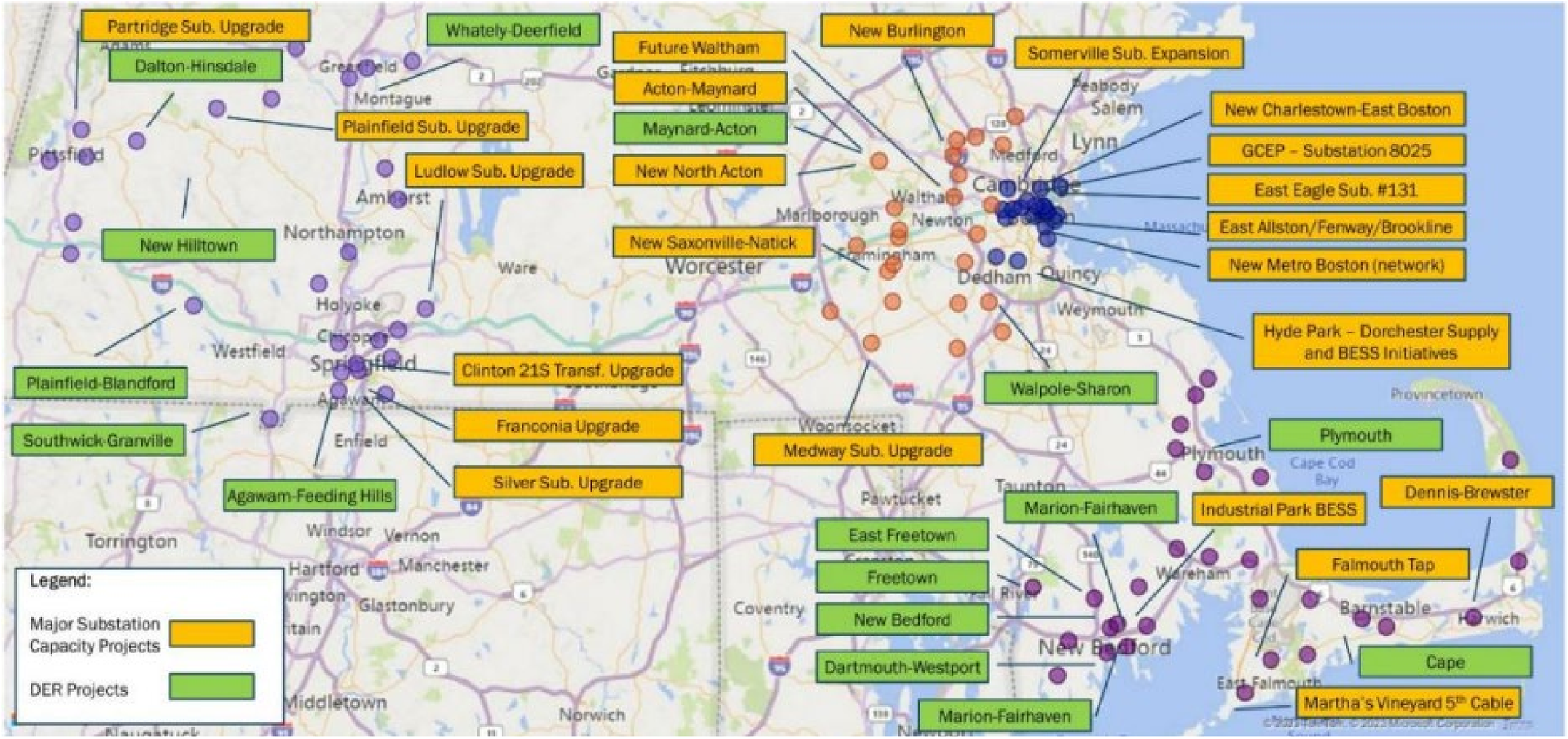
Sites chosen for grid upgrades/expansions may be single most important decision for natural resources



Source: National Grid, draft *Electric System Modernization Plan* (2023).

Proposed Grid Updates- Eversource

Eversource proposes to build 17 new substations, and upgrade 26 existing substations



Two Policy Pathways

Siting and Permitting

Executive Order
Sept 2023

↓

Commission on
Energy Infrastructure Siting and Permitting
Fall 2023-March 2024

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Energy and Climate Law
Nov 2024

↓

Straw Proposals
Spring 2025

↓

Draft Regulations
Fall 2025

SMART: Solar MA Renewable Target Program V 3.0

Stakeholder Sessions
July 2024

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Straw Proposals
December 2024

↓

Draft Regulations
Spring 2025

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Conservation NGOs:
Align State Goals, Policies and Plans

Land Use: No Net Loss

Biodiversity: Nature Positive

Climate Change

- Natural and Working Lands CO2
- Resilience

Renewable Energy

Retain Existing Environmental Laws

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SMART 3.0: State solar Incentives (Solar MA Renewable Target) – MA DOER

- Opportunity: Ambitious renewable energy goals.
- Challenge: Incentives originally accelerated solar in important habitat, especially forests.
- Solution: Influence science-based siting and permitting, and institutionalize conservation science.

SMART 3.0: What to Expect

Ineligible: Ground-mounted projects >250 kW up to 5MW:

- BioMap Core Habitat
- Top 20% potential CO2 emissions + foregone sequestration (2070)
- Other applicable state & nationally protected lands including:
  - protected open space, wetland resource areas, State Register

Eligible projects not sited on previously developed land subject to:

- On-site visitation from an external Environmental Monitor
- Updated Performance Standards
- Mitigation fee based on the impact of their development
- Any new legal requirements in 2024 Siting & Permitting Law/Regs

In-Lieu Fee Mitigation

SMART Program Straw Proposal
May influence Siting and Permitting regulations

Upfront fee for ground-mounted projects >250 kW on undeveloped land.

- Each project will pay a fee based on the impact of their development
- Mitigation fee calculation is informed by weighted criteria related to environmental impacts and policy goals
  - Carbon storage
  - Ecological integrity
  - Agricultural potential
  - Cumulative impacts
  - Grid alignment
- Funds will be directed to a trust account to support conservation, ecosystem and biodiversity programs
- DOER intends to annually review data sources, criteria, and weightings to reflect policy goals

Energy Infrastructure Siting and Permitting Law:

Key Components

- Generation/Storage and Transmission
- Scaled: state/local consolidated processes
- Front-Loaded Pre-Filing Process
- Site Suitability
- Cumulative Impacts
- Community Engagement/Support/Benefits
- Municipal Support/Agency Growth

Energy Infrastructure Siting and Permitting Regulations

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Site Suitability

- Create guidance to identify locations for preferential siting
- Criteria: biodiversity, forest carbon, climate resilience and environmental Justice
- Dept Fish and Game and Dept Conservation and Recreation on panel creating guidance

Mitigation Hierarchy

- Sequentially: Avoid, Minimize, Mitigate
- Scoring System based on impacts to criteria
- Contemplating “No Go” areas
- Authorizes EEA to develop municipalities assess a mitigation fee

Paths Forward

SMART

- Draft Regulations (Soon)

Siting and Permitting

- Straw Proposals (Spring)
- Draft Regulations (Fall)

Site Suitability

- Guidelines (TBD)

Model By-Law (Summer)

Funding

- EnviroBond (Now)

It Ain't Over...

Environmental Criteria/Scoring

Ineligible Areas

Mitigation Hierarchy

Compensatory Mitigation

Cumulative Impacts

Paradigm Change

Meet conservation and development goals by applying site suitability and mitigation hierarchy

Learn More!

SMART
Siting and Permitting Reforms
massaudubon.org/growingsolar
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