



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES**

Elizabeth Mahony, Commissioner

**New England Electricity Roundtable:
Clean Energy Siting**

September 29, 2023

Department of Energy Resources

Develops and implements policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable, equitable and resilient energy future for all residents, businesses, communities, and institutions



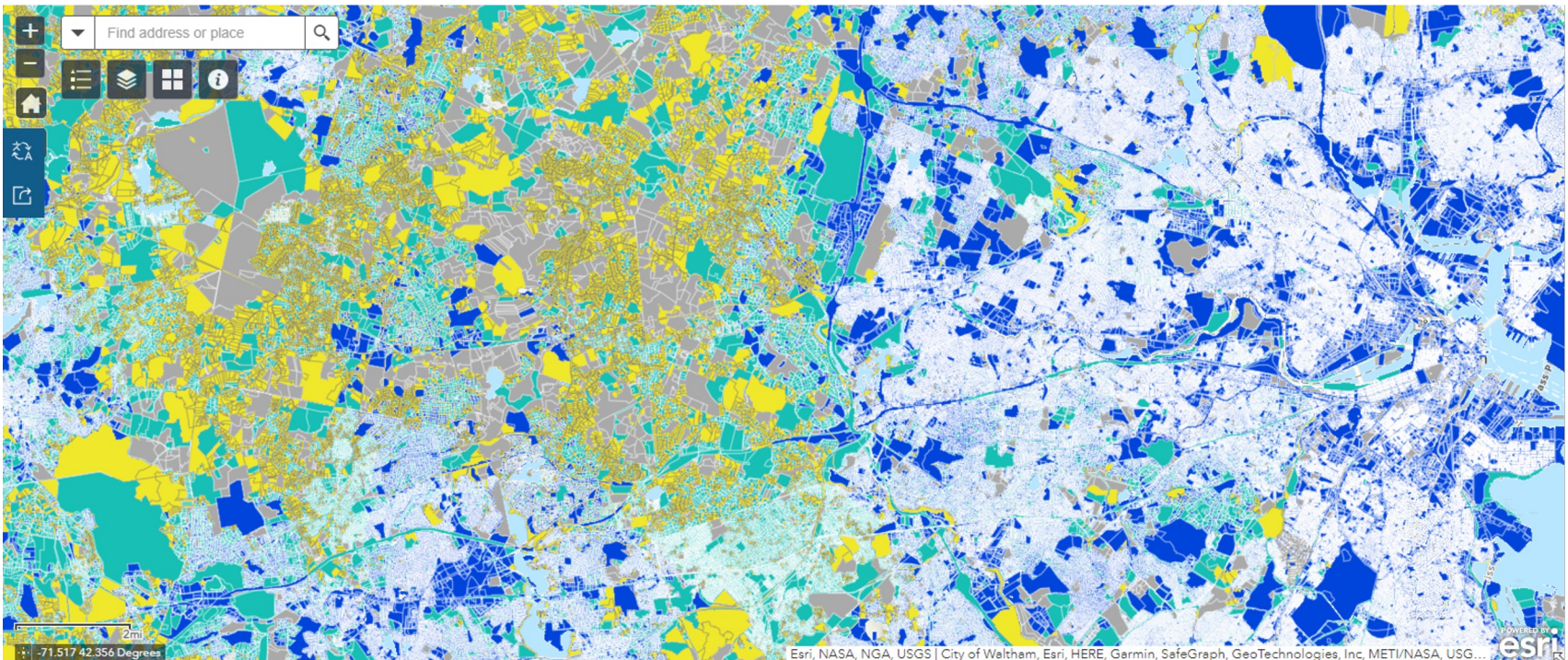
Massachusetts' Solar Target

- Massachusetts and the region need to steadily continue to deploy solar generation over the next three decades to meet anticipated increased electricity demand in 2050
- Massachusetts needs 27 - 34 GW of solar by 2050
 - This is more than 10 times the amount of solar currently installed in Massachusetts



Technical Potential of Solar Study

- Quantify the technical potential for solar development in Massachusetts
- An estimate of the total amount of solar that could physically be built, thematically ranked for suitability based on natural resource impacts and economic factors

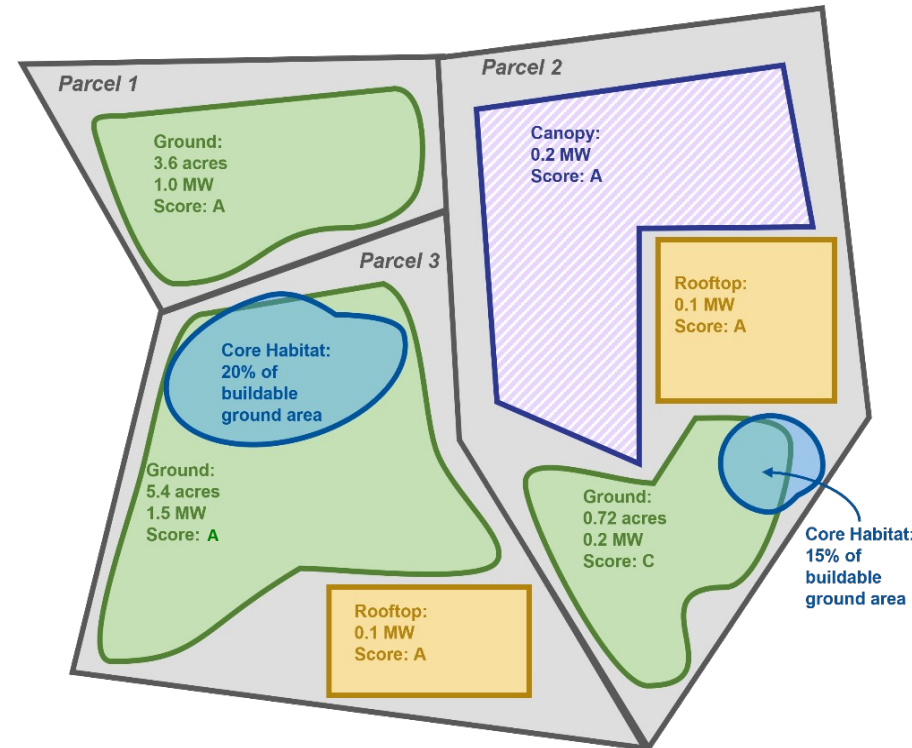


Suitability Categories

Table 1. Suitability Categories and Criteria

Category	Criteria
Agriculture	Does the parcel contain agricultural soils and/or is it designated as farmland?
Biodiversity	Does the parcel overlap with Biomap area?
Other Ecosystem Services	Does the parcel overlap with a Wellhead Protection Area, and/or Areas of Critical Environmental Concern?
Embedded CO _{2e}	How much embedded and foregone CO _{2e} does the parcel contain?
Grid Infrastructure	How far is the parcel from a substation?
Slope and Aspect	What is the parcel's grade and what direction does it face?

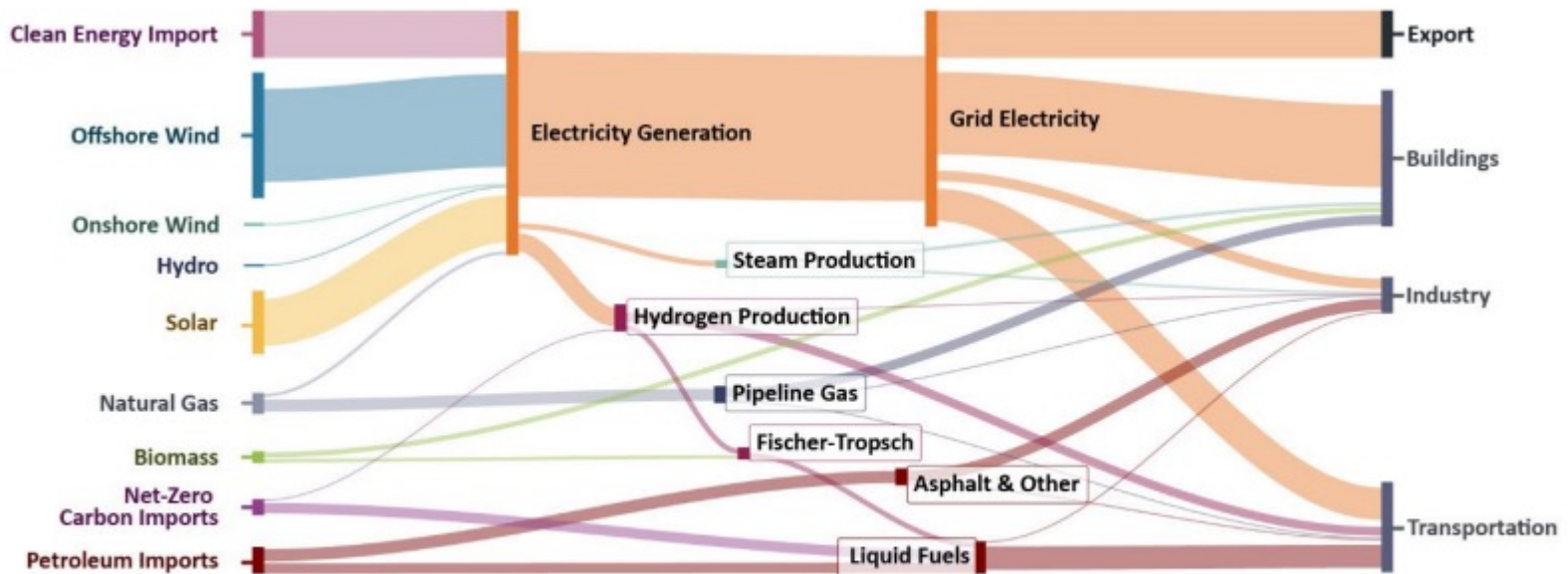
Figure 2. Suitability scoring example – biodiversity category



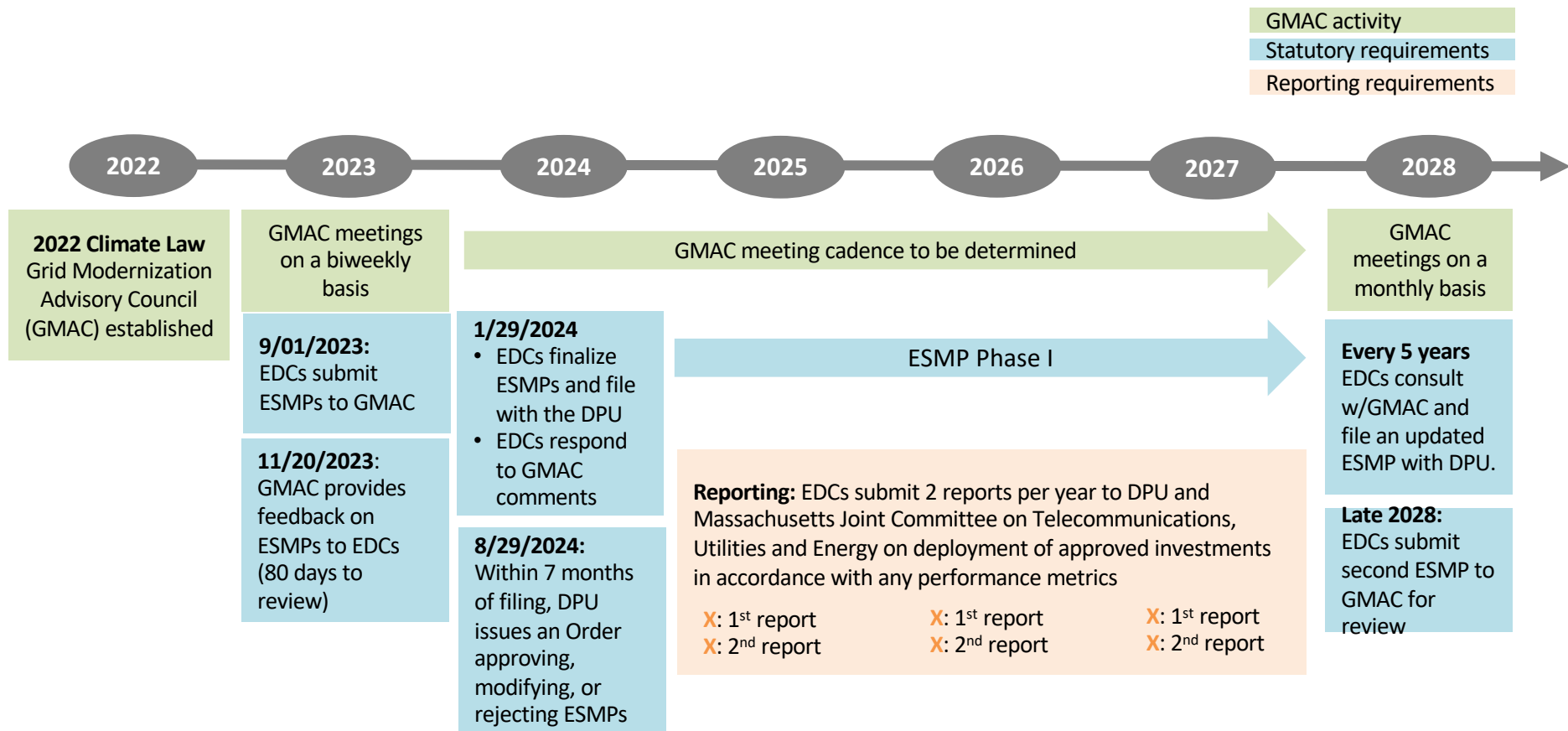
Grid Modernization Advisory Council (GMAC) Background

- The Global Warming Solutions Act requires Massachusetts to achieve net zero emissions in 2050
- Clean Energy and Climate Plan for 2050: the dominant strategy to decarbonize transportation and buildings is electrification. Power sector planning is essential.

2050 Commonwealth Energy Use (source: 2050 CECP)



GMAC & Electric Sector Modernization Plan (ESMP) Timeline



Commission on Clean Energy Infrastructure Siting and Permitting



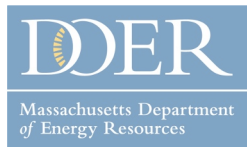
Accelerate our clean energy transition quickly, sustainably, and equitably

- Interagency Task Force of state government agencies
- Focus: siting a significant amount of new energy infrastructure – solar and wind generation, storage, transmission, distribution
- Remove barriers to responsible clean energy infrastructure development
 - Reduce permitting timelines, provide communities' input, ensure the benefits of the clean energy transition are shared equitably
- Recommendations by next Spring



Interagency Offshore Wind Council

- Greater interagency collaboration is needed to grow and advance Massachusetts' offshore wind industry
- The Council will develop and maintain an Offshore Wind Strategic Plan with stakeholder input



THANK YOU!