Assessment of Massachusetts' Waste-Sites for Potential Photovoltaic System Development

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Can Massachusetts Reach Its Renewable **Energy Goal?**

Massachusetts has created the goal of producing 1600MW of renewable energy by 2020. MassDEP is working to reach this goal and solve the challenges that have arisen from it. These challenges include:

- Contaminated waste-sites throughout Massachusetts that have not been remediated
- Commonwealth of Massachusetts cannot achieve its greenhouse gas reduction goal without attracting developers
- Developers encounter community opposition in some locations where they attempt to install renewable energy facilities

Methods for Assessing Waste Sites for Potential PV Development:

Environmental Analysis

Using the EPA RE-powering America's Land Decision Tree Tool

Economic Viability

Using the National Renewable Energy Laboratory's **PVWatts Economic Tool**

Social Sustainability

Engagement with developers and community to determine best PV development practices



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Results:

- Claiming a site is unappealing visually does not stop it from development
- Most influential characteristic is usable acreage
- Education about solar energy and its benefits within a
 - community helps reduce opposition
- On-site abandoned buildings do not pose a threat to a redevelopment project







Department of Environmental Protection

- Proactively engage with community to maximize support
- Use fact sheets to promote PV system development on future sites

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Resources:

Map generated using Google Earth Pro FireAlpaca used to get the map without a background