Historic Preservation As Means To Scale Up Solar Energy Development

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Historic Preservation (HP) - Challenges

Limited Protection from Damage & Demolition

Only federal properties on the National Register of Historic Places are protected - less than 7% of the total.

Stringent Energy Performance Standards

Major U.S. cities (e.g., DC, NYC) are increasingly adopting stringent energy performance standards—including on-site renewable energy—with no exceptions given to historic places.

Siloed from Related Built Environment Disciplines

Specialized knowledge required to practice in the field makes it challenging to engage and collaborate with other built environment professionals, resulting in missed opportunities for synergies.

HP + Solar = A Win-Win

Creation of Additional Value for Investors

Stacking solar and historic preservation tax credits, SRECs, and other incentives can motivate investors to preserve historic places.

Improving Energy Performance of Old Buildings

Installing solar systems on historic properties will provide sustainable energy supply and help meet new energy performance regulations.

Help Preserve Diversity in History

Buildings are most often preserved for their architectural qualities, rather than for the importance of historical events that occurred there. As a result, many buildings of historical importance are lost, especially in minority communities. The investment benefits of HP + solar offer attractive opportunities to preserve these buildings.

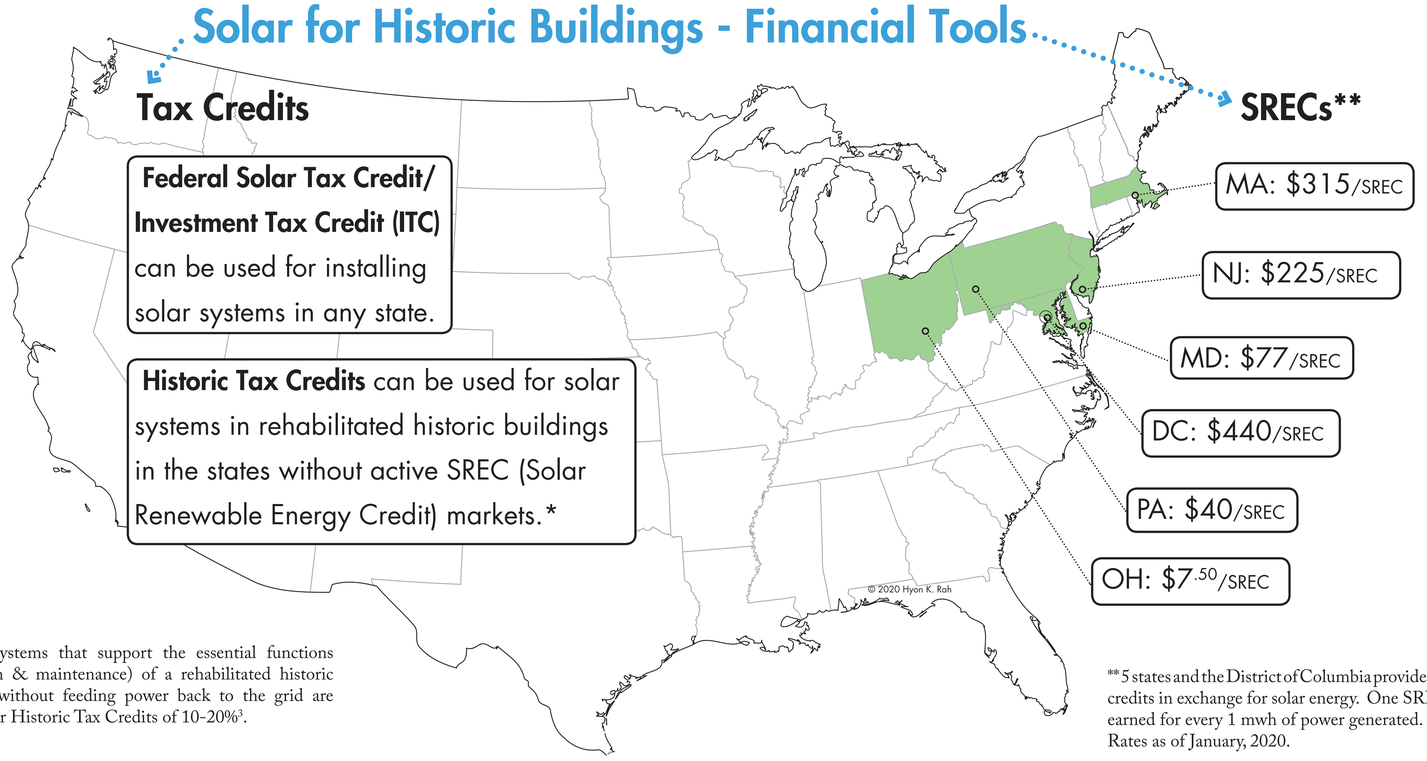
Positioning Solar as Historic Preservation Partner

Retrofitting historic buildings with solar can be faster than new construction, and the historic buildings offer character and meaning.

Supporting Local Economies & Livable Communities

Historic districts have been linked to above-average property value increase[1] and improved walkability[2].

Solar for Historic Buildings - Financial Tools



* Solar systems that support the essential functions (operation & maintenance) of a rehabilitated historic building without feeding power back to the grid are eligible for Historic Tax Credits of 10-20%[3].

** 5 states and the District of Columbia provide these credits in exchange for solar energy. One SREC is earned for every 1 mwh of power generated. Rates as of January, 2020.

Solar for Historic Buildings - Case Studies

- A 1930s house in a historic district in KY
- Standing-seam metal roof with a thin-film integrated solar system
- Cost: $23,000 with tax credits
- Payback period: 10 years

- Free-standing solar panels located at the rear of a historic industrial site
- Solar systems were deemed acceptable as they cannot be seen from the front and are in line with the industrial character of the building

- Rooftop solar installation at Fleet Science Center in historic Balboa Park, San Diego
- Unsightliness on the historic buildings and landscape avoided while clean energy goals met
- 684 photovoltaic (PV) panels generating up to 100 kW to feed back to the grid

Solar panels installed as awnings, on the side and rear of a historic post office, not seen from the front

[1] http://lhdct.org/documents/Property%20Values%20LHD%202011.pdf
[2] https://forum.savingplaces.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=b73e8fc7-7fb2-0fc7-202c-d0ed58ff3089&forceDialog=0
[3] https://www.nps.gov/tps/tax-incentives/taxdocs/about-tax-incentives-2012.pdf

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