

Reducing Costs through Low-Impact Design Toolkit and PV Modeling Software Plugin

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Summary

Projected ground-mounted PV deployment of 6.6 million additional acres (roughly the size of Massachusetts) by 2050 will place increasing land use pressure on local and state jurisdictions. Many local governments are already enacting moratoriums and regulatory barriers to large-scale PV. SETO-funded research into low-impact design approaches including pollinator-friendly solar, agrivoltaics, and providing forage for bees or sheep show promising results. However, even if solar companies want to implement low-impact designs, the approach is frequently improvised and ad hoc. The ARC-UP Toolkit for PV Design Innovation will develop, organize and provide low-impact design innovations and data from expert practitioners, relate the low-impact designs directly to sample language for corporate and utility procurement, and create a proof-of-concept plugin for PV modeling software. Regional solution providers and project developers will be able to communicate and connect within the plugin to generate enough revenue to sustain and expand the ARC-UP model.

Key Personnel/Organizations

Fresh Energy – Rob Davis
Fosterra, LLC – Ben Foster
Solar Beekeepers – John Jacob, Dustin Vanasse, Mike Kiernan
Seed Mix Design – Pete Berthelson
American Solar Grazing Association – Lexie Hain
Agrivoltaics researcher — Dr. Greg Barron-Gafford



NREL's research into low-impact solar

