The **Project Optimizer (Design) Tool** is an interactive decision-making tool which allows users to enter up to nine attributes of their proposed or existing project, plus their state to explore customized best practices and resources.

**How to use the tool:** The user enters their state, and certain values are auto-populated. The user can then manually enter values from the remaining drop-down menus. These values signify project attributes. Up to nine attributes can be auto-populated or selected in addition to the state: Utility Type, System Size, Bill Credit Value, LMI Customer Savings, Enabling Legislation, RECs and Incentives, Tax Benefits, Energy Rate, Regulatory Structure and Installation Type.

When the user has entered all the fields and clicks “Fetch Best Practices” the Toolkit will display a new temporary page with “Outputs”. These are identified based on a logic framework that has mapped and prioritized attributes entered for the user’s proposed project to each type of output (full algorithm described below). The Toolkit will display 1-4 similar projects from the LIFT database, 1-3 case studies, a list of project finance best practices for the proposed project, and a short list of additional resources.

The user can review outputs through an iterative process of identifying the optimal combination of community solar projects that meets their specific needs. A user can edit and re-enter attributes for any number of combinations, and review the new set of outputs delivered for the modifications made. Each time a user clicks “Edit Attributes” the inputs entered will remain static, so the user can tweak attributes in an ordered manner.

**How to leverage Optimizer outputs:** An interactive way to engage with the LIFT database of 450+ LMI community solar projects. These outputs are meant to inform the user’s decision-making process to guide the development of community solar projects. Recognizing the highly variable and complex landscape of community solar, the tool allows users to decide which elements to change. The project attributes also note how they will affect the value stack of the project. The higher the value stack is, the more likely it is to drive LMI inclusion and prioritize higher LMI customer savings.

Similar projects will enable users to explore the numerous combinations of project elements and how these drive LMI inclusion. Similarly, but with more depth, each case study highlights an innovative community solar project or program. They were developed in collaboration with the project developer/owner, and include original research and narrative on innovative approaches and lessons learned around common project barriers. Project finance best practices have been identified through the development of these case studies, and highlight creative financing models that have been proven successful at driving LMI inclusion and savings. Finally, the optimizer will highlight the most relevant external resources from the Toolkit library for the user’s project.
The outputs together will help users to better understand the complexities behind community solar project attributes, which attributes they will benefit most from by modifying, and how.

**Description of the Project Optimizer Algorithm:** Outputs are generated directly from project data (similar projects), or derived from key findings within innovative projects (best practices and case studies). The final output – external resources – pulls from a curated library.

Algorithms have been defined for each type of output to result with the most applicable combination for the user's proposed project.

- Similar Projects with the most “hits” on driver value matches (between the proposed Project Profile, and existing projects in our database).
- Each Best Practice has a set of driver values that must be matched, in a 1:1 value match or a combination. For example: If Tax Treatment = No, THEN Best Practice: Tax Equity Investment.
- Each Case Study has a set of Best Practices mapped to the drivers as mentioned above.
- Resources are also mapped to the set of driver values as Best Practices are.