



WHAT IS SEED?

The Standard Energy Efficiency Data (SEED) Platform™, produced by the U.S. Department of Energy (DOE) in partnership with Lawrence Berkeley National Laboratory (LBNL), is an open-source, web-based platform that allows users to import building energy data from multiple sources into one central repository and track compliance with building energy initiatives.

SEED BENEFITS

- Serves as a repository for disparate sources of building energy data
- Creates projects to look at a subset of buildings and track compliance
- Can translate data into the Building Energy Data Exchange Specification
- Able to connect to other federal and proprietary tools, and share data with the public
- Serves as the national brand and standard for building energy data storage
- Includes built-in privacy protections to manage user permissions and data sharing

CREATING A DATA PLATFORM FOR ENERGY EFFICIENCY

For cities that have benchmarking and transparency policies, data collection and management represents one of the most critical components of a successful program. Under these initiatives, city officials have to annually collect building energy data from building owners and in many cases disclose that information to the public, in an efficient manner that preserves data quality. To accomplish this, cities have developed their own internal solutions for data management through tools such as Microsoft Access and Excel. However, these options are time-consuming and have the potential for introducing human error.

Platform Tools

SEED is designed to be flexible and allow for cities to tailor their data solutions to fit their programs. SEED is web-based to facilitate potential connections to other tools such as Portfolio Manager to preserve data quality, save staff time, and increase the opportunity for add-on development. Developers can use the Application Programming Interface (API) to create additional functionality for the platform, as requested by their users. Also, data can be shared out of SEED to other federal tools such as the Buildings Performance Database, or with the public, through the API. Building performance data stored within the platform is translated to the Building Energy Data Exchange Specification, or BEDES, which is a building energy data dictionary developed

by DOE to allow for easier transfer and comparison of building energy metrics across platforms.

Users can create projects within SEED from their building lists to track compliance with an ordinance or focus on small groups of buildings within a larger portfolio. Platform managers can also set permissions for individual users of SEED and create “sub-organizations” to maintain privacy protections around sensitive data and allow for the sharing of data across different organizations.

An Open Source Solution

With the SEED Platform, the DOE is seeking to create a standard code base that would allow local jurisdictions to utilize inter-operable software systems and data that can be shared and updated within the SEED community as the market and technology advances. The SEED source code is currently hosted on Github, a public hosting service, and test accounts are available via an LBNL-hosted site. Using a common core system and data standard, local jurisdictions can collaborate and share best practices on energy efficiency programs, while software developers can offer hosting and contribute platform updates to the open-source code base. This code-base is currently managed by the DOE, but the participatory nature of the project allows for local jurisdictions to have input on the direction and management of the system.



For more information, contact
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