

DOE Building Data Tools

Cal TF Data Charrette

June 21, 2023

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ENERGY STAR Portfolio Manager*

Tool that enables you to benchmark the energy use of any type of building, all in a secure online environment. Nearly 25% of U.S. commercial building space is actively benchmarking in Portfolio Manager.

- Identify underperforming buildings to target for efficiency improvements.
- Find out which buildings in your portfolio are the most efficient, then replicate energy-saving practices at underperforming buildings.
- Set investment priorities using built-in financial tool to compare cost savings across buildings in your portfolio.
- Verify savings and prevent snapback
- Earn recognition for ENERGY STAR score of 75 or higher
- Free, online web tool

CA IDSM: encourage building owners to track their buildings

<https://portfoliomanager.energystar.gov/pm/login.html>



* Joint program of the EPA and DOE

Building Energy Asset Score

Provide a simple scoring methodology to help building owners understand their buildings' current and potential performance. Provide a cost-effective way to quickly evaluate a building's integrated performance and to encourage deep retrofits and programs toward the net zero goal.

- “energy asset score” evaluates the physical characteristics of a building "as built" and its overall energy efficiency independent of its occupancy and operational choices (building use schedules and plug loads).
- Input known building characteristics, infers missing characteristics
- Free, online web tool

CA IDSM: pair with ENERGY STAR score to find buildings with operational improvement opportunities; (high asset score + low ENERGY STAR score)

<https://buildingenergyscore.energy.gov/>



Audit Template (feature of Building Energy Asset Score)

Collect, store and report building energy audit data. Cities can use this tool to collect standardized data from many buildings by specifying which fields are required and which are optional.

- Collect standardized set of inputs
- Output data for many in standardized format for analysis/review
- Free, online web tool

CA IDSM: programs could use this to collect information about buildings in their portfolio and use as part of a screening/targeting process for applicable incentives.



<https://help.buildingenergyscore.com/support/solutions/articles/8000053354-overview>

SEED Platform

Lower the burden on cities implementing energy programs by streamlining the process of collecting and managing data from large groups of buildings.

- Identifies which buildings must comply with a jurisdiction's program
- Organizes and cleans the data that comes in
- Interfaces with other programs to provide energy recommendations to building owners and decision makers.
- Open source, web-based platform
- Host yourself or using a hosting service
- Import data from ENERGY STAR Portfolio Manager

CA IDSM: Could be used as part of NMEC 2.0 programs to store data about portfolio

<https://seed-platform.org/>



BETTER

Enables building operators to quickly, easily identify the most cost-saving energy efficiency measures in buildings and portfolios using readily available building and energy data. With minimal data entry, BETTER benchmarks a building's or portfolio's energy use against peers; quantifies energy, cost, and greenhouse gas (GHG) reduction potential; and recommends energy efficiency measures (technological and operational) for individual buildings or portfolios.

- Free, online web tool
- Open source web application, API, and analytical source code

CA IDSM: utilities could use this to evaluate quickly buildings across their portfolio to identify highest energy consumers relative to peers for program targeting.

<https://better.lbl.gov/>



ComStock and ResStock

When a city, state, utility, or national policymaker, company, or researcher wants to know: “How much energy are the buildings using, for what, and when for XYZ location?” or “What’s the (energy, carbon, etc.) impact of changing XYZ in my building stock?” They can get a credible, defensible answer from ComStock and ResStock datasets

- Characteristics of existing building stock
- Modeled energy consumption per county by fuel, building type, and end use at 15 min. resolution
- Modeled energy impact of a variety of technologies
- CA buildings used DEER assumptions as starting point

CA IDSM: EE potential studies, emerging tech evaluation, program design, electrification and decarbonization analysis, IRP, evaluating Building Performance Standards for POUs working with governing municipality

<https://resstock.nrel.gov/>

<https://nrel.github.io/ComStock.github.io/>



Thank You

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SEED Platform: <https://seed-platform.org/contact/>

BETTER: https://better.lbl.gov/contact_us/

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