LEED O+M: Existing Buildings | v4

Optimize energy performance

Possible 20 points

Glossary

Intent

To reduce environmental and economic harms associated with excessive energy use by achieving higher levels of operating energy performance.

Requirements

Establishment

None.

Performance

Demonstrate increased energy efficiency or efficiency improvement beyond EA Prerequisite Minimum Energy Performance as described below. Each building must provide actual metered energy data. A full 12 months of continuous energy data is required.

Case 1. ENERGY STAR Rating (3–20 points)

For buildings eligible to receive an energy performance rating using the EPA ENERGY STAR's Portfolio Manager tool, points are awarded for ENERGY STAR scores above 75, according to Table 1. For projects outside the U.S., consult ASHRAE/ASHRAE/IESNA Standard 90.1–2010, Appendixes B and D, to determine the appropriate climate zone.

Table 1. Points for ENERGY STAR performance ratings

ENERGY STAR rating	Points
76	3
77	4
78	5
79	6
80	7
81	8
82	9
83	10
84	11
85	12
86	13
87	14
88	15
89	16
90	17
91	18
93	19
95	20

Case 2. Projects not eligible for ENERGY STAR Rating

Projects not eligible to use EPA's rating system may compare their buildings' energy performance with that of comparable buildings, using national averages or actual buildings, or with the previous performance of the project building.

Option 1. Benchmark against typical buildings (1–20 points)

Path 1. National average data available (1–20 points)

Demonstrate energy efficiency performance that is at least 26% better than the median energy performance for typical buildings of similar type by benchmarking against national average source energy data provided in the Portfolio Manager tool. Points are awarded according to Table 2.

Table 2. Points for percentage improvement over national average (Option 1, Path 1) or comparable buildings and historical data (Option 3)

Percentage improvement	Points
26	1
27	2
28	3

29	4
30	5
31	6
32	7
33	8
34	9
35	10
36	11
37	12
38	13
39	14
40	15
41	16
42	17
43	18
44	19
45	20

Path 2. National Average Data Not Available (2–14 points)

If national average source energy data are unavailable for buildings of similar type, benchmark against the building site energy data of at least three similar buildings, normalized for climate, building use, and occupancy. Points are awarded according to Table 3.

OR

Option 2. Benchmark against historical data

If national average source energy data are unavailable, compare the building's site energy data for the previous 12 months with the data from three contiguous years of the previous five, normalized for climate, building use, and occupancy. Use Table 3 to determine points.

Table 3. Points for percentage improvement over comparable buildings (Option 1, Path 2) or historical data (Option 2)

Percentage improvement	Points
27	2
30	4
33	6
36	8
39	10
42	12
45	14

Option 3. Benchmark against both similar buildings and historical data

Follow the requirements of both Option 1, Path 2, and Option 2 to benchmark against the site energy data for the three similar buildings and the building's historic data. Use Table 2 to determine points.