

Energy Use in Medical Offices

Medical Offices Using Portfolio Manager

5,422 Properties

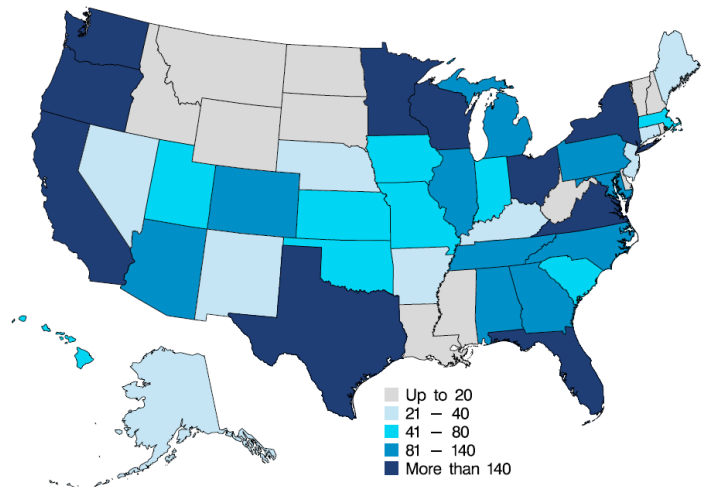
353 Million ft²

41 Average ENERGY STAR Score

The U.S. Environmental Protection Agency's (EPA) ENERGY STAR Portfolio Manager is changing the way organizations track and manage energy. Because of this widespread market adoption, EPA has prepared the DataTrends series to examine benchmarking and trends in energy and water consumption in Portfolio Manager. To learn more, visit www.energystar.gov/DataTrends.

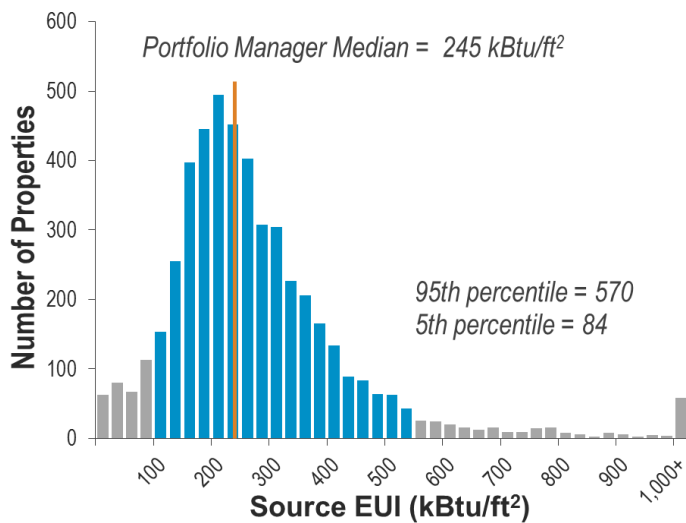
Benchmarking by State

Number of Medical Offices



What is a typical operating profile?

Energy use intensity (EUI) ranges from less than 100 to more than 1,000 kBtu/ft² across all medical offices, with those at the 95th percentile using more than 6 times the energy of those at the 5th percentile. The distribution has a negative skew, which means the most energy intensive properties are further away from the median than the most efficient. Properties may use more or less energy for many reasons, including variable equipment efficiency and energy management practices, as well as variations in climate and business activities.



The median medical office in Portfolio Manager is approximately 43,000 square feet and operates 65 hours per week. But the typical property use patterns observed in Portfolio Manager vary just as much as energy. As you can see, medical offices of all shapes and sizes benchmark using Portfolio Manager.

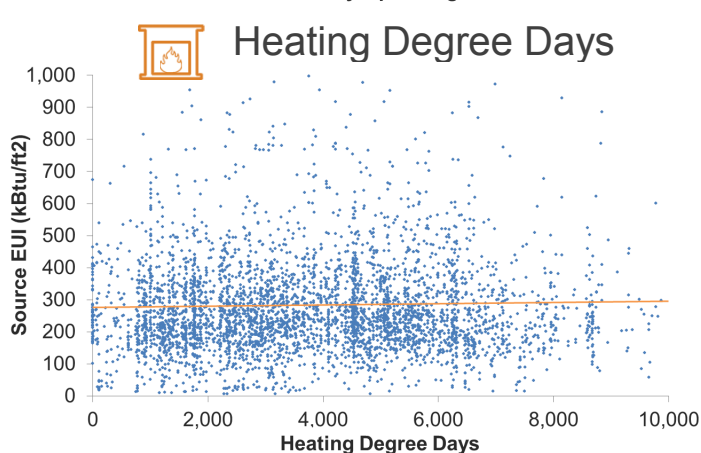
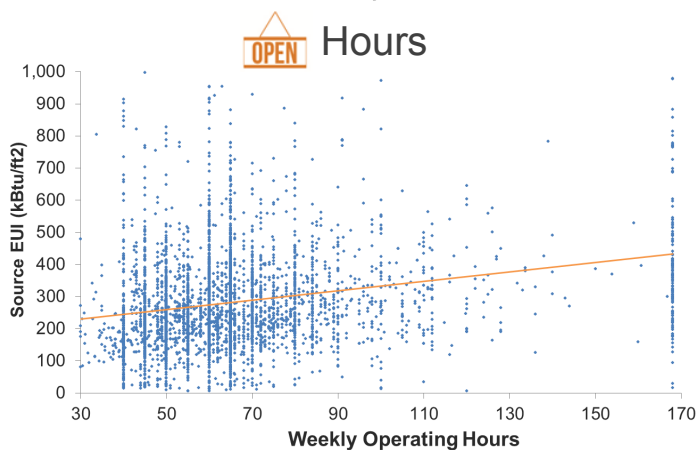


| Property Characteristic | 5th percentile | Median | 95th percentile |
|----------------------------------|----------------|--------|-----------------|
| Square Feet | 7,114 | 42,636 | 202,354 |
| Weekly Operating Hours | 40 | 65 | 112 |
| Workers per 1000 ft ² | 0.8 | 2.2 | 5.0 |
| Heating Degree Days | 804 | 3,716 | 7,642 |
| Cooling Degree Days | 124 | 995 | 3,588 |

What is Source Energy? Source energy is the amount of raw fuel required to operate your building. In addition to what you use on site, source energy includes losses from generation, transmission, and distribution of energy. Source energy enables the most complete and equitable energy assessment. Learn more at: www.energystar.gov/SourceEnergy.

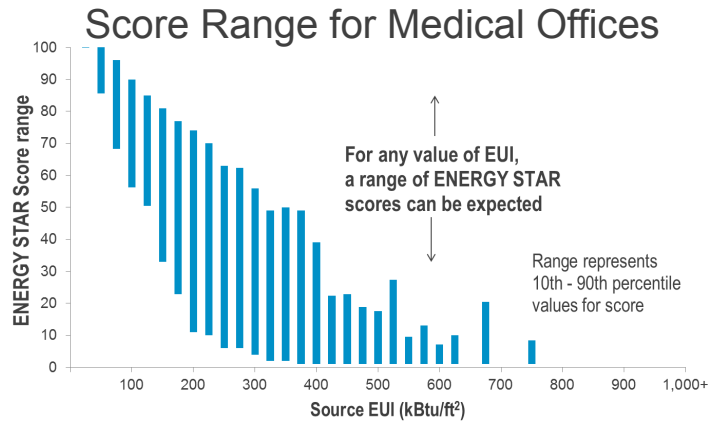
What characteristics affect energy use in medical offices?

Business activity and climate are often correlated with energy consumption. For example, medical offices that have more workers, operate more hours, and/or experience more heating degree days (HDD) use more energy, on average. The orange trend lines in the graphs below show the impact of each characteristic on energy use. The steeper the line, the bigger the impact. While these trends hold true on average, the blue dots demonstrate that for any given value of workers, hours, and HDD, a broad range in energy use is observed. Similar trends can be seen for other property characteristics, such as cooling degree days.

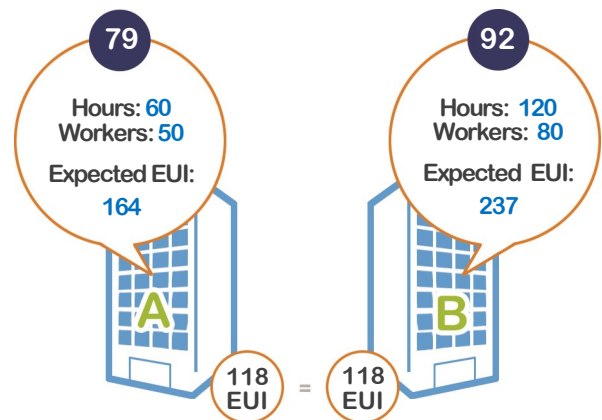


How does EPA's ENERGY STAR score vary with energy use?

EPA's ENERGY STAR score normalizes for the effects of operation. While properties with lower EUI generally earn higher scores on the 1-100 scale, an individual property's result depends on its business activities. For any given EUI, a range of scores is possible.



Let's look at two medical offices, Office A and Office B. They have the same EUI of 118 kBtu per square foot, and are identical except that Office B has more operating hours and more workers per square foot. Because Office B has more intensive activities, it is expected to have a higher EUI than Office A, based on ENERGY STAR scoring models. Since Office B is *expected* to use more energy, but *actually* uses the same energy, it earns a higher score.



Note: Total number and floor area of properties benchmarked reflects cumulative data through 2013. Analysis of energy use and operational characteristics includes 4,877 properties benchmarked between in the most recent 5 years. The data is self reported and has been filtered to exclude outliers, incomplete records, and test facilities. Portfolio Manager is not a randomly selected sample and is not the basis of the ENERGY STAR score. To learn more, visit: www.energystar.gov/DataTrends.