

Benchmarking for Success



how you can use energy
benchmarking to get ahead

about the authors



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ben leigh, energy analyst

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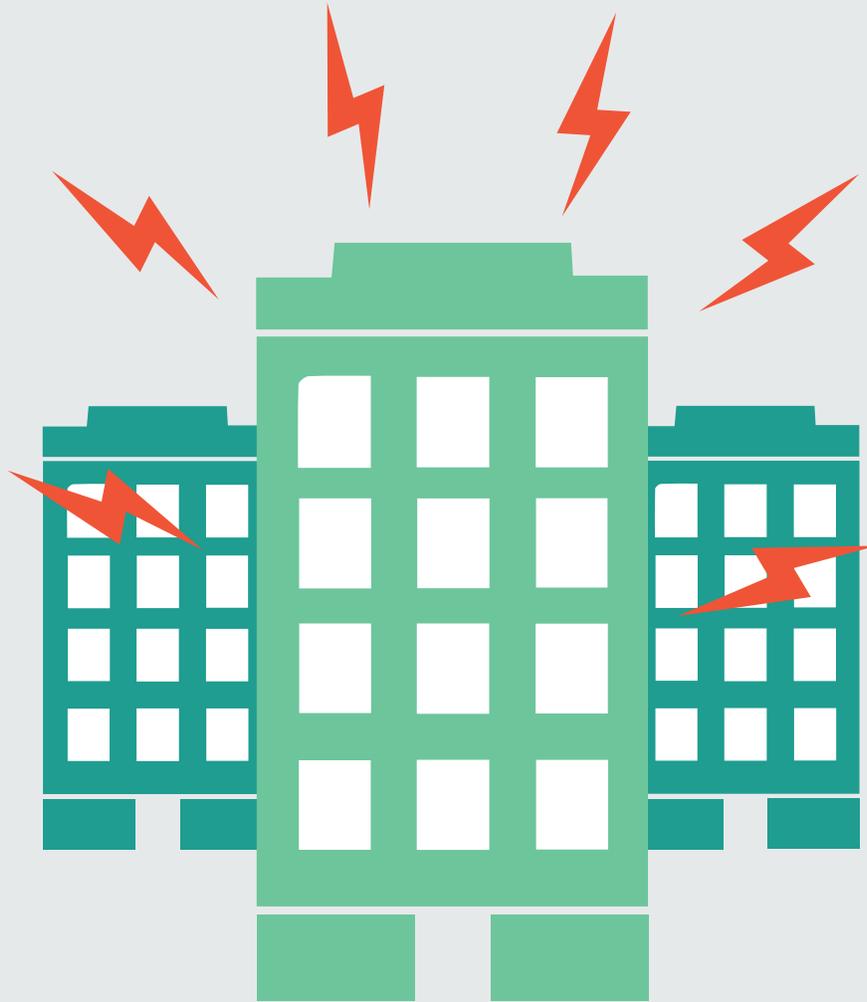
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chapter 1 introduction

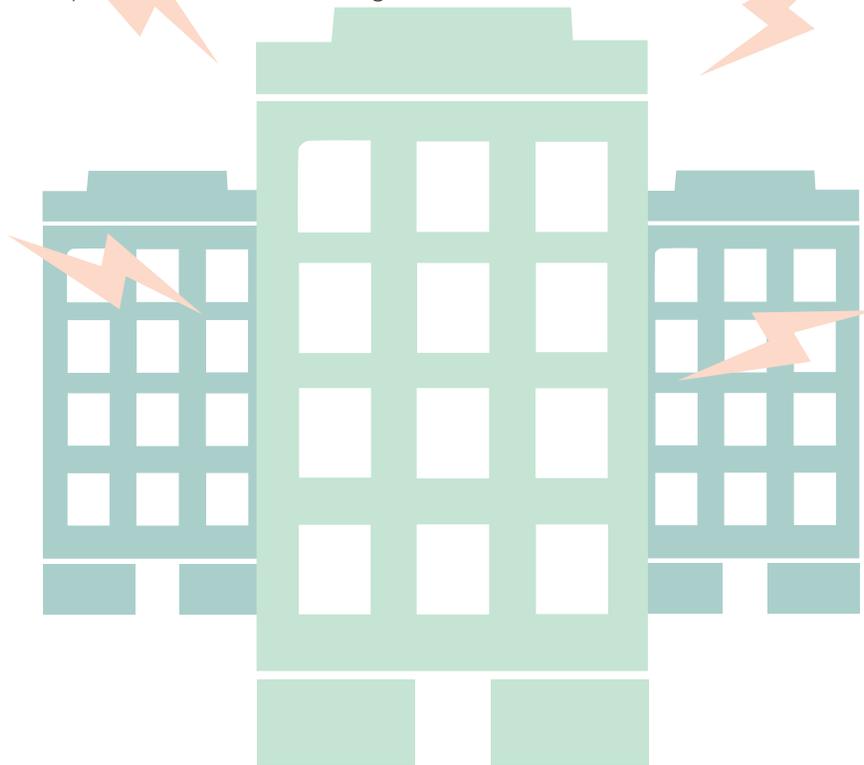
why should I care anyway?



Across the country, more and more cities and states are turning to mandatory energy benchmarking as a means to address the growing concern over energy waste. The policies vary from place to place in terms of which buildings fall under the mandate, what is required, and so on. These cities and states are relying on the [EPA's Energy Star Portfolio Manager](#) as a standardized method to track benchmarking efforts.

Energy waste in the built environment is a massive threat to our global health. We believe that benchmarking as a practice is always a good idea for commercial and residential buildings alike. Whether mandatory benchmarking policy is the answer is beyond the purpose of this eBook, although that is certainly an interesting topic of debate which we enjoy engaging in every so often. Rather, the purpose of this eBook is to support those required to participate in benchmarking by providing them with information they need to understand the policies, streamline compliance, and use these policies to their advantage.

We hope you enjoy!



chapter 2

benchmarking 101



what is benchmarking?

The most logical place to begin is with the basics: what is energy benchmarking? On its simplest level, energy benchmarking is the act of figuring out how your energy performance stacks up. This is done by comparing energy use to something similar, whether that's your energy performance from another period in time, or similarly situated buildings around the country.

Benchmarking has become a politically charged topic in recent years due to state and city mandates requiring that building owners benchmark their properties. This unfortunately has led many to have a soured idea of benchmarking in general. But benchmarking doesn't have to be negative, it doesn't have to be a burden. Those who get out ahead of it will see that energy performance is the key to substantial savings. Businesses who embrace energy performance data and make it part of their core business intelligence stand to drastically reduce their energy costs, opening the door to more sustainable financial performance.

Benchmarking energy use is by no means a new practice, it's been around since the first environmentally or financially minded person tried to control energy costs. The trendiness of energy benchmarking, however, is a new thing.



For those of us in the energy, commercial real estate, and building operation sectors, we can hardly escape the term “benchmarking” nowadays. This is thanks in part to the emergence of mandatory benchmarking policies across the country. Minneapolis, New York, Boston, Seattle, and San Francisco are among the cities to institute some form of mandatory benchmarking. The reach and depth of benchmarking policies vary from case to case. For instance, New York City requires all buildings 50,000 square feet and over, or those on shared lots that are combined over 100,000 square feet to benchmark, while California’s statewide policy extends down to nonresidential buildings 5,000 square feet and larger. Philadelphia’s benchmarking data remains private, it is only required to be exposed to those involved in buying or leasing the building, while New York’s benchmarking data is open to public record. Some policies require disclosure of the Energy Star score for each building, a score from 1-100 that rates the building’s energy performance compared to similar buildings nationwide, while other policies don’t rely on the Energy Star score.

It’s safe to say that we’re all still learning quite a bit when it comes to benchmarking. We cannot say with certainty just yet which is the most successful policy or how to roll out the best new benchmarking laws. But we can say that benchmarking seems to have contributed at least to minor energy use reductions. A [study](#) by Energy Star found that buildings whose energy data was entered into Portfolio Manager saved on average 2.4 percent in annual energy costs. However, the true value in benchmarking energy use is not whether or by how much it independently reduces energy use. Instead the value is that it exposes energy waste in a uniform manner, providing a much needed impetus to change behavior and curb energy waste. The most lasting and significant energy reductions will come from this exposure.

“...the true value in benchmarking...is that it exposes energy waste in a uniform manner, providing a much needed impetus to change behavior and curb energy waste.”

round up: what is benchmarking?

- Benchmarking energy use is the practice of comparing performance to something similar, be it to another period in time or to a similar building's energy use
- Despite its recent surge as a hot topic, benchmarking is not a new practice
- Cities and states nationwide are beginning to pass mandatory benchmarking policies
- Boston, New York City, Philadelphia, Minneapolis, Austin, and San Francisco are among the cities that have passed benchmarking mandates
- These cities are using the EPA's free energy benchmarking tool, Energy Star Portfolio Manager
- It's too soon to speculate about the real impact of benchmarking policies, but it's safe to say that benchmarking energy is a solid business practice that opens the door to real energy savings



chapter 3 california's energy policy



Let's take a look at California's statewide benchmarking policy as it is one of the most comprehensive policies on the books. By understanding a little more about benchmarking policies, we can begin to get ahead of them and truly leverage them to improve our bottom line.

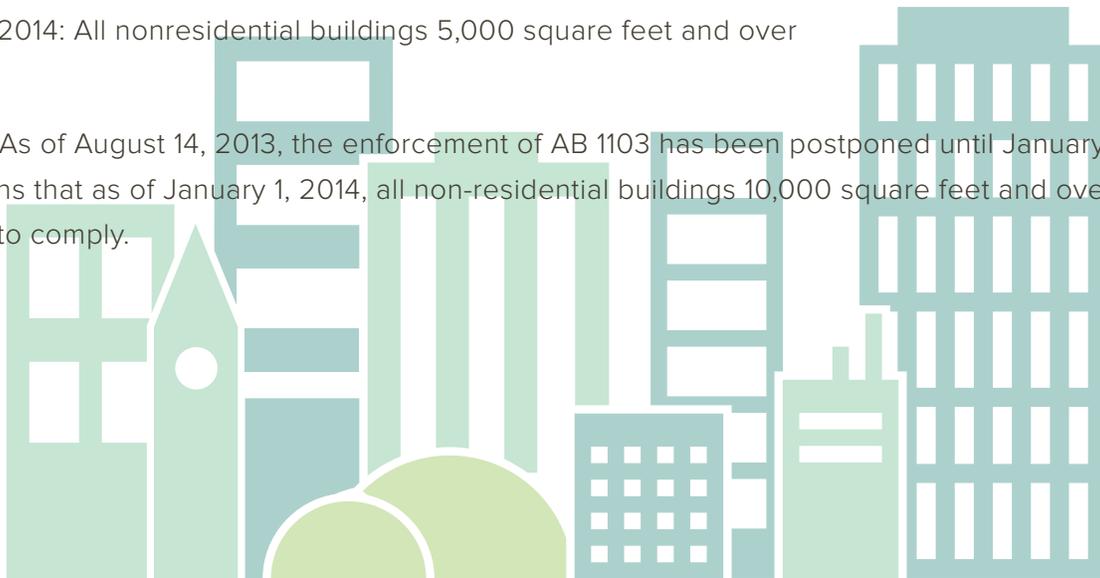
California's Nonresidential Building Energy Use Disclosure Program began in 2007 when [Assembly Bill 1103](#) was passed through the state legislature. This bill requires nonresidential buildings 5,000 square feet and over to disclose energy use data as part of any financial transaction regarding the whole building. The bill requires that the energy use data be provided through the EPA's Portfolio Manager. The bill also sets up a rolling timeline for compliance based on building size.



Timeline for compliance with AB 1103

- September 1, 2013: All nonresidential buildings 50,000 square feet and over
- January 1, 2014: All nonresidential buildings 10,000 square feet and over
- July 1, 2014: All nonresidential buildings 5,000 square feet and over

*Update: As of August 14, 2013, the enforcement of AB 1103 has been postponed until January 1, 2014. This means that as of January 1, 2014, all non-residential buildings 10,000 square feet and over will be required to comply.

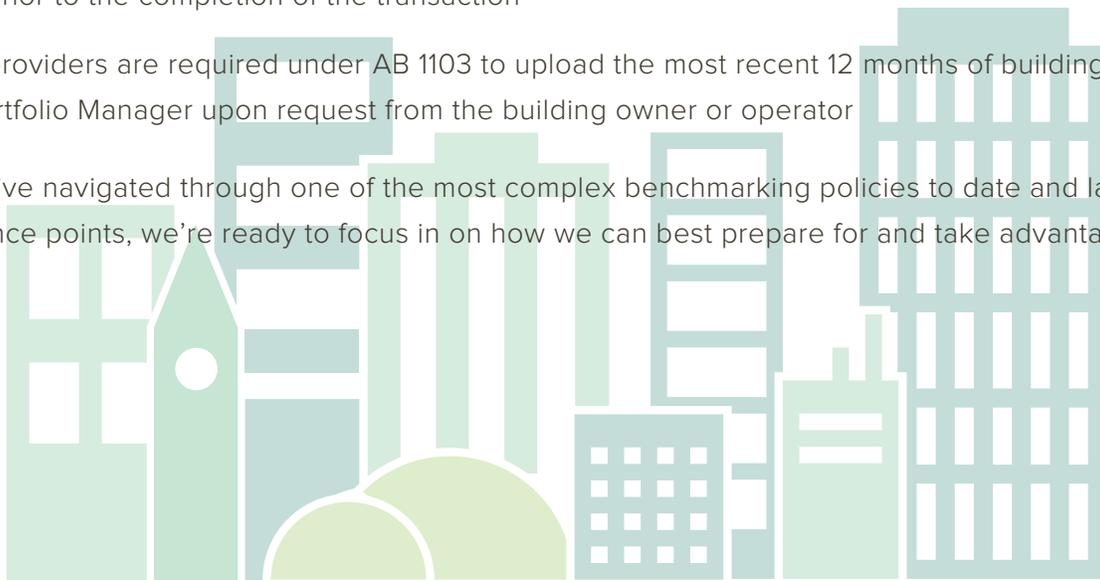


So what does compliance mean in this case? To be compliant with AB 1103, based on the size of your building, if you plan to enter into a financial transaction (lease, sale, refinance) for the entire building on or after the corresponding date listed on the previous page, you must present an energy use disclosure form to the other parties in the transaction.

To make this easier for Californians, here's a quick cheat sheet of the key points to remember about AB 1103:

- The compliance timeline is rolling based on building size
- AB 1103 requires that you provide an energy use disclosure form when you enter into a financial transaction for your entire building
- The energy use disclosure form should be generated in Portfolio Manager and should include the last 12 months of energy use data
- Disclosure reports are valid for 30 days
- Disclosure reports must be provided to all other parties involved in the transaction no less than 24 hours prior to the completion of the transaction
- Utility providers are required under AB 1103 to upload the most recent 12 months of building utility data into Portfolio Manager upon request from the building owner or operator

Now that we've navigated through one of the most complex benchmarking policies to date and laid out the key compliance points, we're ready to focus in on how we can best prepare for and take advantage of these policies.



chapter 4

gearing up for compliance



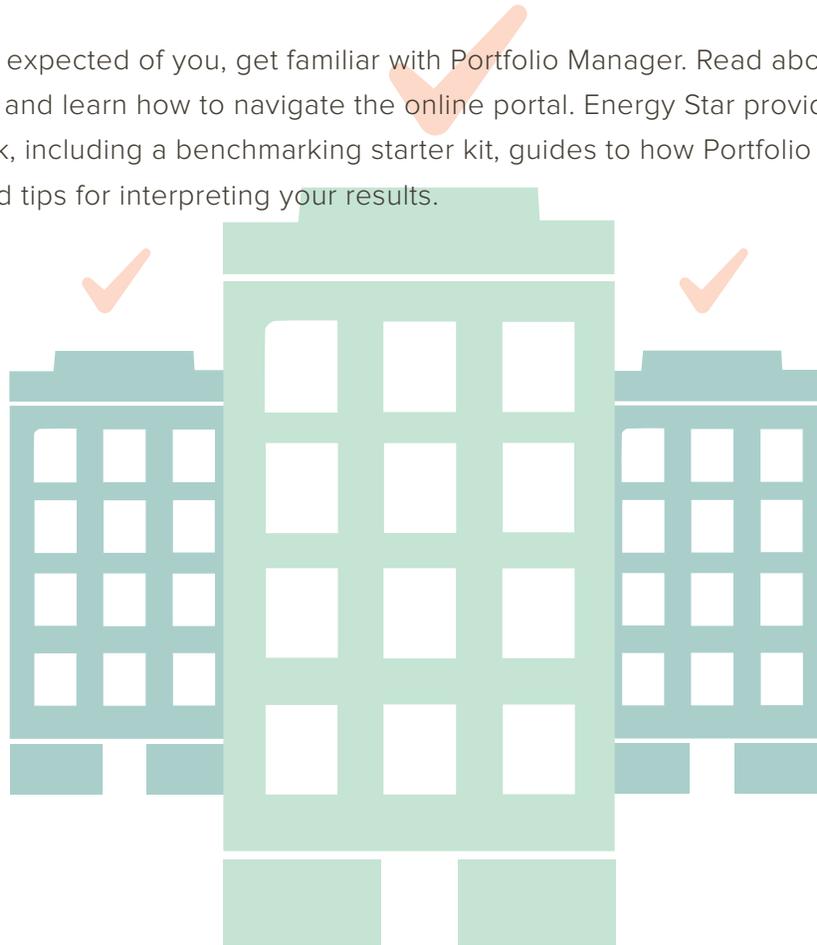
For owners or operators of even the smallest building portfolios, the thought of complying with Portfolio Manager benchmarking can be daunting. How will you learn to use Portfolio Manager? Where will you find the time to upload data? How will you navigate through the policy to figure out what's really expected of you? What will this mean for your buildings in a competitive real estate market?

We shouldn't be discouraged by energy benchmarking mandates, we really should be encouraged and embrace what they can offer us in terms of potential energy savings. Whether you live in an area where policies have already been passed and you are actively working on compliance, or your city or state is considering a new policy, it's never a bad time to embrace benchmarking. The trick is knowing how to streamline the process and convert benchmark data into a competitive advantage.



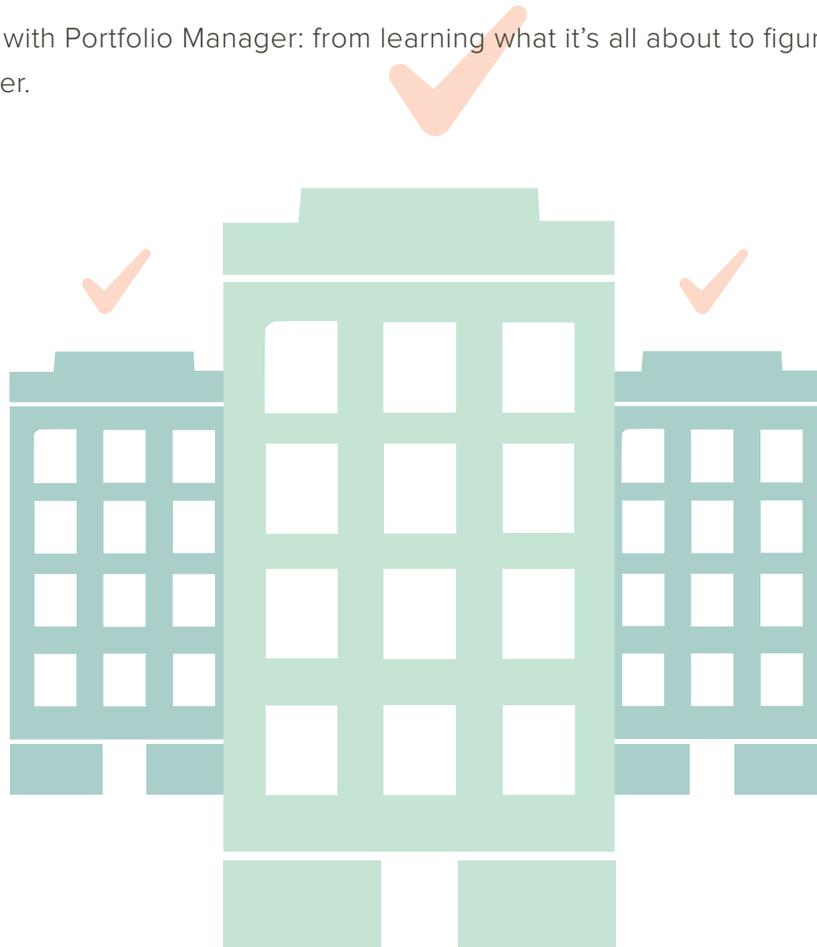
Whether you need to comply with an existing benchmarking policy or you're preparing for your city to pass its own, the first thing you must do is understand the policy itself. Educate yourself on the requirements, the compliance dates, government assistance programs offered, etc. For instance, California building owners may be cringing at the thought of inputting all of their energy data into Portfolio Manager before the September 1st compliance date. But if they read into the requirements of the policy, they'll see they can take a deep breath and relax a bit. Owners are only required to upload data on their property if they are planning a financial transaction involving the entire property. If they are, they can request that their utility providers upload the data on their behalf.

Once you know what's expected of you, get familiar with Portfolio Manager. Read about its purpose, case studies around its use, and learn how to navigate the online portal. Energy Star provides some [great resources](#) to help with this task, including a benchmarking starter kit, guides to how Portfolio Manager calculates Energy Star scores, and tips for interpreting your results.



round up: gearing up for compliance

- Get the facts: Find out exactly what's required by your city or state's policy and prioritize tasks accordingly.
- Learn about assistance offered as part of the policy: Are utility providers required to do the heavy lifting? If you're required to disclose your Energy Star score, do you need to pay an engineer to approve your results?
- Become familiar with Portfolio Manager: from learning what it's all about to figuring out how to use it, this is a no-brainer.



chapter 4

the bottom line



Here's the best part: if we must comply with mandatory benchmarking, we can take it a step further and use this effort to improve our own bottom line. Benchmarking on its own is helpful, it gives us great insight into how we're performing compared to similar buildings, or how we're performing compared to the same period last year. But we have to ask ourselves, "what's next?". If your building is one of the few with stellar energy performance and Energy Star scores to be admired, then shout it from the rooftops. Now that you have benchmarked and have this data in hand, even if you're not required to publicize it, go ahead and make it as public as possible. Market the fact that your company is running such an immaculately efficient building, make sure potential clients or partners are aware of the work you've done to improve your energy performance. These are all major bragging rights, and you must take advantage. If you're in commercial real estate, you can check out [this eBook](#) that contains a few more tips on marketing your green building.

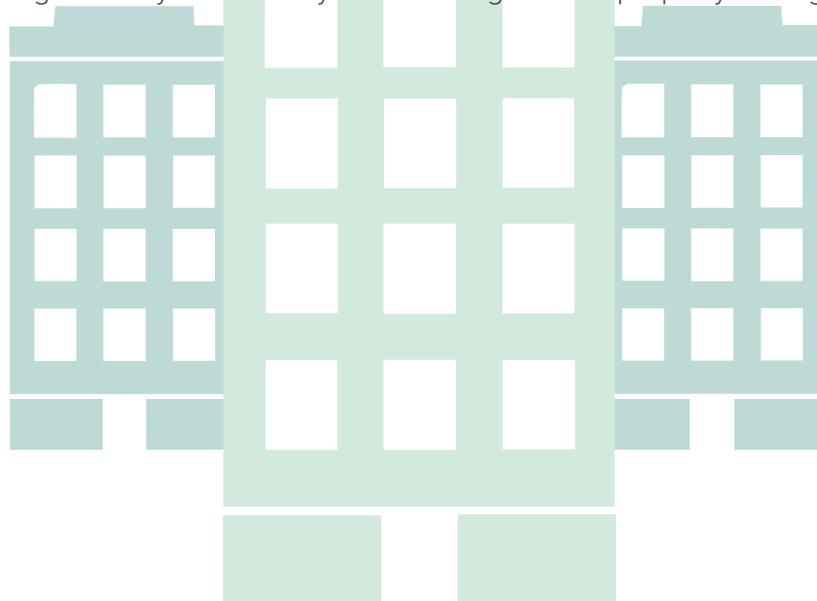
If you're among the majority of us, though, whose buildings have room for improvement, then use benchmarking as your first step towards making those improvements. Laying out energy use data is great, but it's hardly actionable. In cases where our energy performance may not be ideal, benchmarking only shows us there's a problem, but it can't offer a solution.

Invest in a tool to help you and your team take action. [Energy management software](#) helps you transform that energy performance data into major savings. But don't just settle for any system. Many energy management software offerings are little more than a dashboard of energy use. While this is helpful to see, it lands you in the same situation as Portfolio Manager, with no actionable insight. Instead, use an energy management solution that offers real-time energy monitoring in addition to energy modeling capabilities. Energy models allow you to customize your energy strategy with a range of energy conservation measures and let you forecast the impact of your strategy on your budget and energy use, giving you the foresight you need to make the most lucrative investments in energy performance. That should be our goal in complying with energy benchmarking mandates: turning compliance into lower energy cost and better business performance.

“Energy management software helps you transform that energy performance data into major savings.”

After implementing an energy management system, each member of your team can leverage the system to improve business efficiency and profitability. The CFO can forecast energy costs and identify strong investments for building improvements. Building engineers can access real-time energy data instead of just interval data, allowing them to identify performance issues before they get out of hand and affect your bottom line.

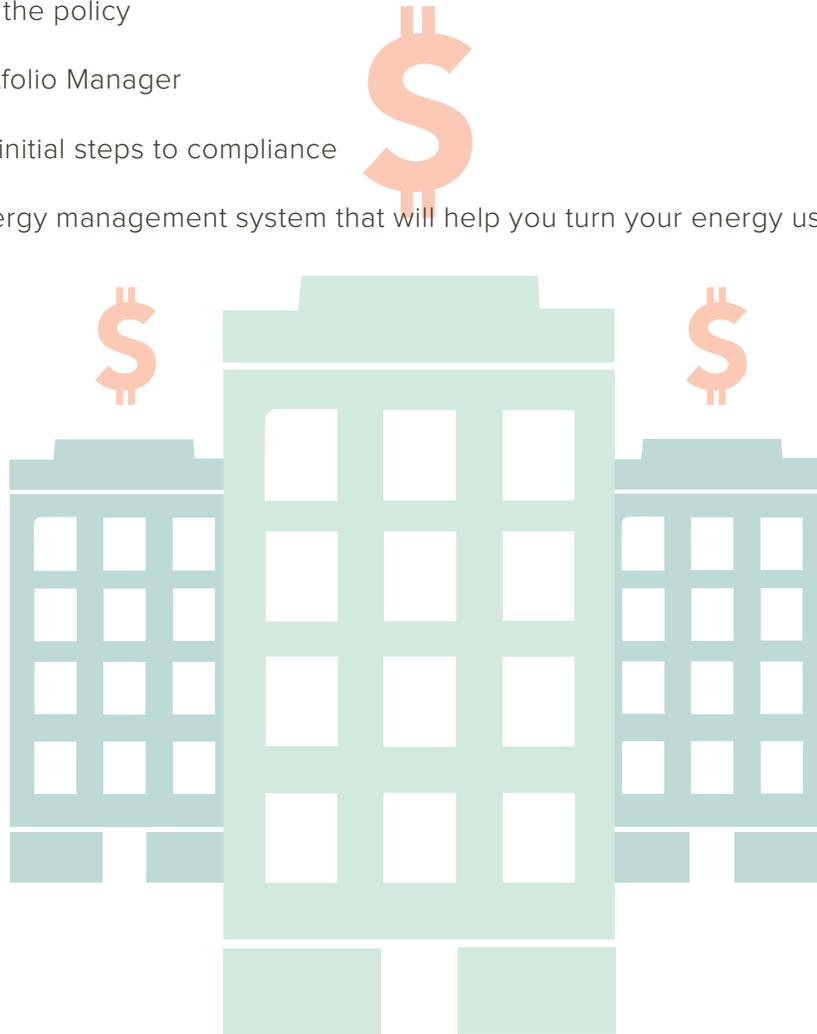
Those in the property management and commercial real estate sectors have unique challenges centered around benchmarking. We've heard repeatedly that mandatory benchmarking will severely handicap buildings whose tenants have been irresponsible with energy use. This seems legitimate, as a property manager in California who is trying to find a new tenant for a manufacturing site, how are you to know that a prospective tenant won't see your 12 month energy data and pass for a building whose most recent tenants engaged in more energy efficient behavior? With an energy management system, you can use this as a competitive advantage. Yes, the previous tenants were irresponsible with energy consumption, but if the new tenants commit to no- or low-cost changes identified by the energy management system, they can expect to see lower ongoing energy costs and improved profitability. Now how does your building stack up to the building down the road? Plus, you can offer tenants access to real-time feedback on their own energy performance through the energy management system. Now you're looking like the property manager to beat.



round up: the bottom line

Benchmarking policies are only just beginning. Whether you support mandated benchmarking or not, you may find yourself needing to comply. So why not make it as easy as possible and turn compliance into a competitive advantage for your organization?

- Get familiar with the policy
- Learn about Portfolio Manager
- Streamline your initial steps to compliance
- Leverage an energy management system that will help you turn your energy use data into action and real savings





Ready to improve your bottom line through energy benchmarking?

Speak with our energy experts to realize your savings potential!

Explore a more intelligent energy strategy at **5twenty.com**



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