



THE SKEPTICAL COMMERCIAL  
BUILDING OWNER'S CASE FOR

# GOING GREEN

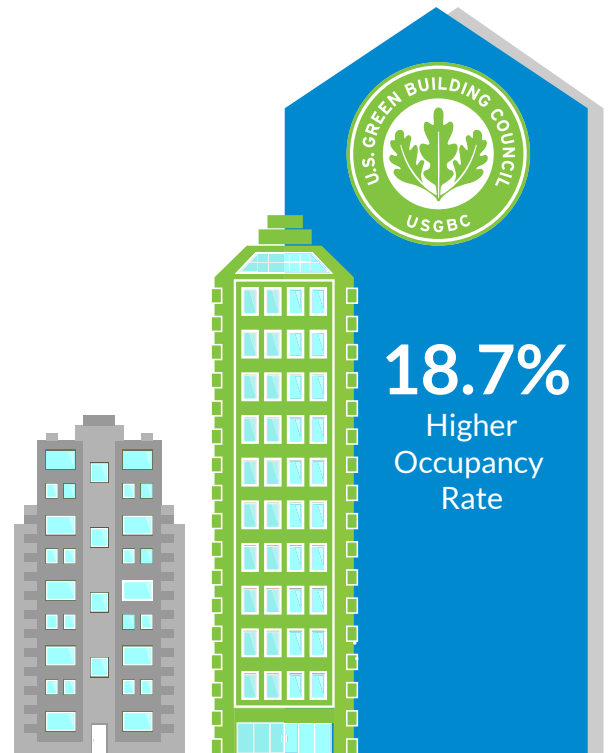
What's more, studies show these changes will also enhance the actual value of your property to prospective buyers and tenants across the board. This isn't speculative, either: recent studies have concretely demonstrated both outcomes to be true, in case after case and building after building. It's easy to understand why. First, energy efficient buildings translate into enormous cost savings with their lowered utility bills and improved indoor comfort. Second, and perhaps even more importantly, people like living and working in green buildings.

One recent U.S. study conducted found that more than 79% of people currently working in a green-certified building would choose a job in the same kind of building over a job in a non-green certified building. Another study conducted by real estate advisors at Bentall Kennedy found that occupancy rates in United States green-certified buildings were 18.7% higher than in buildings without such certifications, with an increase in tenant renewal rates of 5.6% as well.

## Key takeaways?

You don't have to be a self-described tree hugger to get value out of green energy. It's the smart way to protect and grow your real estate investment. In today's marketplace, it may well provide the competitive edge you've been looking for.

And you won't be alone. According to a recent U.S. Green Building Council survey, "going green" is a measurable trend, with almost half of respondents reporting they "expect the majority of their projects in the next three years to be green buildings." Indeed, Mahesh Ramanujam, president of the Council, puts it this way: "With more and more people demanding and expecting healthier places to live and work, more and more leaders around the globe are committing to green building, which is now a trillion-dollar industry. We need to get all buildings on a path to sustainability in order to raise the standard of living for all people around the world, regardless of their circumstances."



# So what exactly is green building, then?

How do you “go green” with an existing commercial space? When it comes to HVAC and related processes, it’s about achieving more with less, utilizing technologies, design, and building materials to make the most efficient use of energy, water and other critical resources to heat and cool your indoor space. In upgrading a commercial building to new, greener standards, the following are typically considered:

- Utilizing building materials that are both non-toxic and sustainable
- Leveraging use of renewable resources like solar power
- Designing spaces to adapt and change with the outside and indoor environment
- Improving indoor air quality, maximizing ventilation
- Reducing overall waste and pollution
- Maximizing all resources, including energy, water and other available resources

## Or in other words, It starts with LEED.

### Quantifying Your Energy Efficiency

LEED, otherwise known as Leadership in Energy and Environmental Design, is the most popular green building certification program in the world. Created by the aforementioned U.S. Green Building Council, it’s a rating system made to quantify the design, build, operation and overall maintenance of a new or existing building in environmental terms. Buildings meeting certain performance ratings are described as LEED certified. This certification designation can open the door to new tax credits, incentives, zoning allowances and other financial benefits.

In Southern California, LEED buildings include nine of the Southern California Gas facilities, as well as the Cherokee Studios office and apartment complex and the PacMutual campus in downtown Los Angeles. As you might expect, studies of LEED buildings show them to be more than 25% more energy efficient than typical buildings of their size and use, with significantly better temperature control and indoor ventilation. Indoor air pollution is far lower as well.



By any measure, LEED is the gold standard. But like anything else in business, change is a process. You can make significant green upgrades within your existing building without seeking LEED certification.

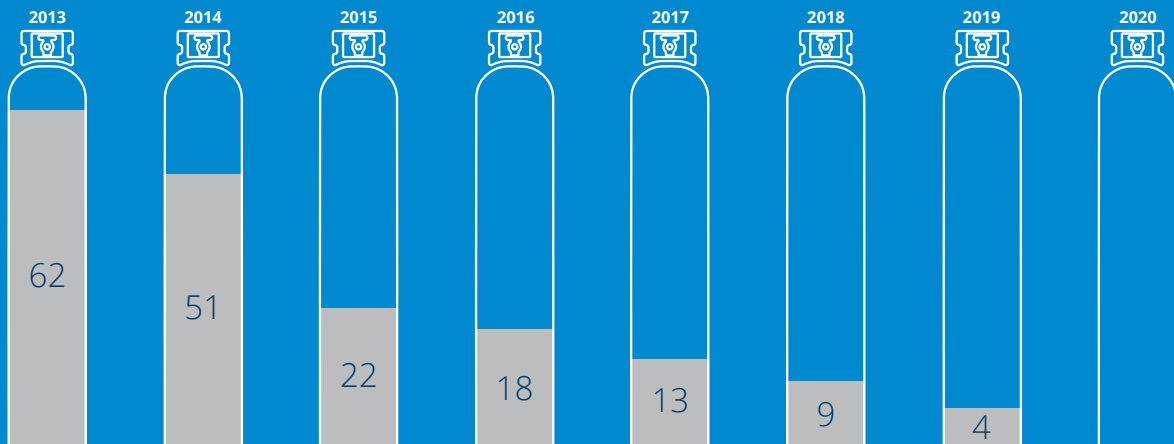


## It Starts with HVAC

Start with your air conditioner. Many building owners may already be aware that the refrigerant R-22, known by its popular brand name “Freon,” was completely phased out from manufacture or importation to the United States on January 1, 2020. As you might imagine, if your current air conditioning system is like many in the San Gabriel Valley and still uses R-22, you’re going to be paying a whole lot more for your indoor comfort in years to come. While it won’t disappear for awhile, replacement costs for this dwindling cooling source over time are likely to become prohibitive.

While there are and will be more refrigerant replacements available, simply retrofitting your existing system may not be the most financially sensible alternative. With new tax breaks available to businesses nationwide for the cost of upgraded HVAC equipment, you can choose a far more energy-efficient system and install it, for less. When you factor in the money you’ll save on lowered utility bills for your new system as well as reduced maintenance costs, it may be the smartest alternative.

### An EPA Mandate Eliminates R-22 Supplies by 2020





## Consider Your Building's Envelope

Another practical going green suggestion for commercial building owners? It's called tightening your building envelope. Sounds like a diet, right? It's not. It's actually a green energy term, defined as the sustainability of your building's exterior walls, roof, and floor. Tightening this indoor/outdoor barrier refers to improving ventilation, air flow, and insulation, so that conditioned air stays in, and leaks or air holes are reduced. Interestingly, good ventilation is a part of this tightened envelope, but only where it's designated. Leaky windows, little-to-no insulation, and drafty hallways are not considered "green" at all.

For existing buildings seeking to improve this envelope, consider installing skylights or other similar "smart" features, as well as incorporating selective window glazing, more insulation, and/or strategic exterior shading. Integrating these changes with a streamlined HVAC system, you'll measurably improve energy efficiency and lower utility bills almost immediately. Maintenance goals too in this kind of greener commercial building move from playing catch-up with repairs to a more proactive, and cost-effective approach. According to the National Institute of Building Science, a greener building envelope and a predictive maintenance schedule allow you to "maximize facility and equipment reliability while minimizing lifecycle costs."



## Incorporate Green HVAC Technology



Green technology for your building essentially focuses on reducing the amount of heating and cooling you're sending to areas that don't need it, while improving the airflow, ventilation and indoor comfort of the areas that do. That unused conference room isn't heated when empty, while the busy warehouse area used only on the weekends is cooled appropriately. In a nutshell, the days of HVAC that only flips "on" or "off" is now obsolete. Consider the following, instead.



## Smart thermostats designed for commercial buildings:

While you may be familiar with this technology for your home, commercial applications of the same technology are calibrated for the unique needs and circumstances commercial spaces typically require. For example, most commercial buildings have multiple thermostats, sometimes in several locations, so commercial smart thermostats are instead designed to accommodate these kinds of functionality requirements. While your home model may require a single PIN from you to operate, commercial smart thermostats can provide access onsite when necessary for employees to use themselves, and other useful features.



## Demand control ventilation system:

A demand control ventilation system provides automatic adjustment of your ventilation equipment in response to occupancy needs, whether through timed schedules, motion sensors, security equipment or even carbon dioxide sensors. Otherwise known as “intelligent airflow management,” this technology provides fresh air when needed, optimizing heat consumption and air quality to save energy, promote occupant well being and even remove indoor air pollution when it’s created. It works, and it’s been shown to result in fewer air filter clogs, extended HVAC equipment life, and reduction in the amount of ductwork needed for any HVAC system.



## Energy audit:

It sounds like a quiz, but it’s really the first step in taking your commercial building green. With a short on-site inspection and subsequent, ASHRAE Level I energy assessment, your HVAC specialist can identify exactly where, when and how you’re utilizing energy resources within your commercial building, and what to do about it. By reviewing everything from lighting systems to average load factors, you’ll have a clear picture of exactly how your building stacks up in terms of efficiency. No matter what upgrades you decide upon, this audit will provide the data you need to evaluate any strategy going forward.

According to a Harvard Law School Forum on Corporate Governance and Financial Regulation, “78 percent of the S&P 500 issued a sustainability report for the most recent reporting period, most with environmental and social performance metrics.”



That trend is only growing upwards. Most pundits agree that these concerns will soon will become the norm for every commercial building owner in the state. Rather than simply buzzwords, green buildings and sustainability are issues facing all commercial building owners.

## The good news?

Getting aboard this fast moving trend yields significant, real-time financial benefits. Don't get left behind.



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