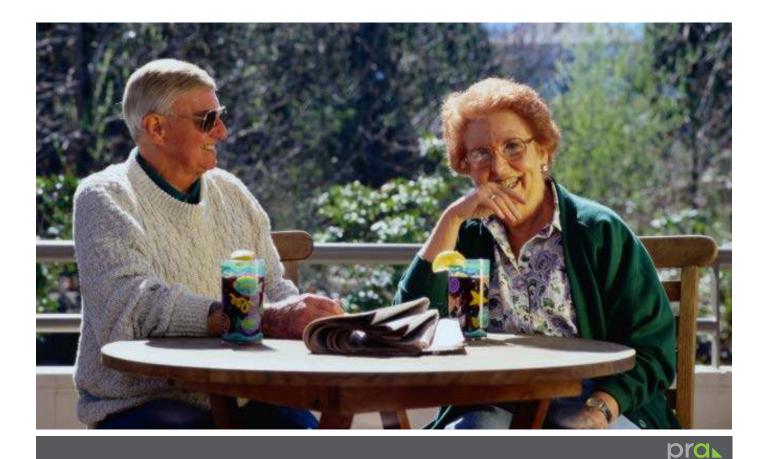




# Sustainability and Long-Term Care how do you get to a zero carbon footprint facility?

The practice of employing sustainable design solutions is arguably more prevalent than ever before. To remain marketable and competitive, long-term care facilities must "go green."



Many long-term care providers are shifting their model of care to a resident-centered approach. With this evolution comes a renewed focus on sustainability and "going green" to promote energy efficiency and reduce operational costs.

### Why is this important?

Not only do sustainable design practices decrease operating costs and provide financial incentives, but they improve the health and safety of the building's most important users - its residents. We, as architects and designers, have the social responsibility to consider the environmental impact of a building and an obligation to our clients to design for the people it serves.

#### The Facts

The proof of a building's environmental impact is undeniable. According to the US Environmental Protection Agency and the US Green Building Council (USGBC), construction and operation of all US buildings result in the following consumption of resources:

- 72 % of electricity resources
- 39 % of total energy used
- 3 billion tons of raw materials annually
- 17 % of freshwater flows

Efforts to reduce these numbers are essential.

### **Addressing Market Demand**

The USGBC indicates that 89% of millennials choose brands aligned with a social cause. More and more people are championing for sustainable design practices, increasing expectations and demand for environmentallyfriendly facilities. Meeting these expectations will differentiate your facility from your competitors.\*



LEED Certification

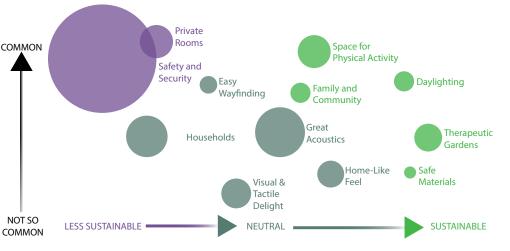
the USGBC. Buildings earn a rating based on a previouslyestablished checklist of sustainability measurements, and all project types, from new construction and renovation projects to existing buildings and neighborhood developments, can be considered. Levels of certification include Certified, Silver, Gold and the highest rating, Platinum. A variety of categories (i.e. design, construction, operation and maintenance) are evaluated.

Quantifying sustainability is not easy. One of the most

#### **Renovate or Build New?**

It's the age-old question that faces many long-term care providers: renovate the existing facility or construct an entirely new building? The first step is reviewing the pros and cons of each option. A remodel includes lower capital investment, immediate benefits and flexibility regarding schedule and budget. Conversely, new construction involves higher initial capital investment, long-term benefits, thorough planning and a more collaborative, synergistic process.

The assistance of an architectural and engineering team will prove helpful in determining which choice to pursue. Next, we explore opportunities for both options.



\*For more information, we encourage you to visit the USGBC's website (www.usgbc.org) or the Environmental Protection Agency's website (www.epa.gov).



## Sustainability and Long-Term Care

Renovation opportunities:

- Lighting upgrades The installation of energy efficient lighting practices, including new lamps, controls and occupancy sensors, is one of the easiest and most reliable ways to improve the sustainability of your building.
- Weatherization More than just adding insulation, weatherization involves HVAC maintenance, air sealing and the use of Energy Star appliances.
- Finishes The use of low/no VOC paint and recycled carpet and finishes provide additional opportunities to reduce the building's environmental impact.

New construction opportunities:

- Daylighting A survey by the US Energy Information Administration reported that only nine percent of healthcare buildings had skylights. A successfully day-lit building allows building users to fully enjoy exterior views, supporting therapeutic needs of long-term care residents.
- Building envelope and orientation New construction allows architects and designers to position the building in a way that maximizes daylighting and views and minimizes heating and cooling loads. The building's envelope, which includes insulation, roofing and glazing, is also more readily-controlled to optimize energy efficiency.
- Focus on Energy A Wisconsin energy efficiency and renewable resource program provides information, resources and financial incentives to Wisconsin residents and businesses that install cost-effective, energy efficient appliances and materials and promote renewable energy projects.

### **Economic Benefits**

Additional financial benefits are linked to employing sustainable design practices, including improvements in



Gregg Golden, AIA, NCRAB, CDT, CSI Partner, Long-Term Care Studio 800.208.7078 ggolden@prarch.com www.prarch.com employee productivity and satisfaction, increased resiliency against unstable energy markets and enhanced asset value and profits. Tax deductions, federal grants and rebates are also available. Furthermore, engaging your staff in the process builds a loyal culture and strengthens your brand identity, which may help your organization attract residents that value and support sustainable facilities.

The concept of "going green" is not one that should be overlooked by long-term care providers. Rather, it should be employed immediately or within the very near future. The financial benefits derived from sustainable design practices are enticing, but it is the fact that these practices may significantly enhance the quality of life of long-term care residents that is most important.





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