



WELLTOWER'S GREEN ARROW BUILDING CERTIFICATION: MEASURING TOTAL BUILDING PERFORMANCE

SOLUTION OVERVIEW

Welltower™, a real estate investment trust (REIT), owns interests in approximately 1,400 properties in major high-growth markets in the U.S., Canada, and the United Kingdom. These consist of senior housing, post-acute communities, and outpatient medical properties. As of March 2017, Welltower is responsible for the management of 260 medical office buildings covering over 17.2 million square feet nationwide. Welltower believes there is a critical interdependence between our health and the health of the planet. As a result, they are committed to incorporating environmentally-friendly technologies and approaches in their real estate portfolio. Welltower's commitment to the Department of Energy's Better Buildings Alliance is just another example of their efforts to lead in sustainability.

With over 40 years of experience dealing exclusively in healthcare investments, Welltower understands the value of measuring and improving the efficiency of its medical office portfolio. When the U.S. Environmental Protection Agency (EPA) retired the ENERGY STAR® certification for medical office buildings in 2013, Welltower identified a gap in the types of certifications available that could validate the high standards of performance they were trying to achieve. As a result, in early 2014 Welltower contracted with a third-party energy consultant to develop an internal certification and recognition program, the Green Arrow Building Certification (GABC), to continue to track and drive the performance improvement of their investments to meet corporate sustainability goals. Built on the foundation of both the ENERGY STAR® certification and the Global Real Estate Sustainability Benchmark (GRESB), the GABC includes multiple measurable aspects of sustainability, including:

- Energy use intensity
- Water use intensity
- Greenhouse gas emissions
- Waste management and recycling
- Indoor environmental quality
- Innovation strategies

By measuring sustainability, Welltower intends to increase the levels of operating efficiency within its portfolio, while reducing operating costs and identifying areas for improvement in building performance.

ORGANIZATION TYPE

Real estate investment trust for healthcare infrastructure

BARRIER

ENERGY STAR® no longer certifies medical office properties and there is no available certification program that encapsulates total building performance for this building type

SOLUTION

Developed a proprietary internal Green Arrow Building Certification (GABC) program that measures energy, water, waste, indoor air quality, and innovation

OUTCOME

Since deploying GABC in 2014, 115 properties have achieved certification with 86 certifying a second time. Over 230 properties participate in the program each year. This program has helped identify areas of improvement and implement corrections. Most properties have seen a 1-12% energy use reduction. In 2016 GABC scores improved 22.5% and 29 additional buildings were certified

POLICIES

The Green Arrow Building Certification (GABC) program began with a pilot of 13 buildings in September 2014 before a full portfolio launch in April 2015. Real Estate Managers share Welltower's commitment to sustainability with tenants, provide tenants with information about the GABC program, and continue to influence change in tenant behavior through Earth Day and E-Waste Events, placing energy saving tips in tenant newsletters and reminders at tenant events. Examples include: recycling, purchasing only ENERGY STAR® certified appliances, upgrading to high efficiency lighting, installing occupancy sensors to turn off lights in unoccupied spaces, and reminders to turn off lights and power off equipment when leaving.

Each year, there are two GABC submission periods: one in April and one in October. The data submitted for each period reviews the previous 12 months of performance. Each Welltower-managed outpatient medical office building completes the submission process annually and has the opportunity (based on scoring) to achieve one of three levels of certification:

- Green Arrow Achiever (20-24 points)
- Green Arrow Performer (25-30 points)
- Green Arrow Leader (31-50 points)

If a property does not earn a certification, it must work towards improving its score and submit data every six months until certified. Properties that do certify during one of the submission periods must go through the process in 12 months and strive to move up a level and/or improve the score.

PROCESS

To develop the Green Arrow Building Certification, Welltower worked with a third-party sustainability

consulting firm to develop the program and assemble guidelines on how all functional groups would carry out the necessary processes. A third-party energy consulting firm was hired to act as the Certified Professional Engineer to review and sign-off on the documents. In 2014, Welltower launched the GABC pilot.

Reviews from the pilot resulted in a few lessons learned. The Senior Sustainability Manager, Real Estate Managers, and Regional Engineers examined the program process and summarized results for further review with executive management. The Senior Sustainability Manager, who oversees the entire certification process and is point of contact for all strategic partnerships, made adjustments to program documents and training guidelines, resulting in a smoother submission process during the first official review period in April 2015. The success of the pilot and additional adjustments have resulted in successful program implementation. The GABC process is outlined in greater detail below:

1. Provide Training

Prior to implementation, both Real Estate Managers and Regional Engineers received full-day trainings from the Senior Sustainability Manager to understand the context of the program as well as review their roles and responsibilities. Educating and engaging both employees and tenants was crucial to increase operating efficiency, which is a key driver to increasing GABC scores and the number of certified buildings during each submission period. To further increase employee engagement, company-wide and new-hire training has evolved to incorporate the program. Quarterly calls are held with each region to provide updates on progress and continued education towards energy reduction and increased building performance.

2. Measure and Track

Each outpatient medical office building measures and tracks energy and water using EPA's ENERGY STAR® Portfolio Manager. Waste diversion is calculated by the waste department that provides contract and bill-pay service for Welltower. Indoor air quality (IAQ) readings are taken monthly and placed in a work order system for ease of monitoring and developing action plans.

3. Engage Tenants and Implement Sustainability Actions

Real Estate Managers are provided with proper tools and well-defined guidelines to facilitate tenant engagement. Throughout the year several tenant events are held with a focus on energy, water, and waste reduction. The tenant newsletter features a "Sustainability Spotlight" each quarter that includes energy-saving tips and a focus on factors affecting building performance like lighting or HVAC.

4. Submit and Verify Data

During each submission process, the Real Estate Manager and Portfolio Engineer complete the verification documents, calculate the scorecard, and provide any required supporting documentation. The scoring was developed by the third-party sustainability consultants; scores are determined by where the usage data and IAQ readings fall within pre-determined acceptable

ranges. The total score indicates the building's eligibility for one of three certification levels: Achiever, Performer, or Leader.

5. Review Certification Submissions

The Senior Sustainability Manager reviews submissions and compiles the initially-approved data for the third-party engineering firm to assess. Once they have completed their review, a 30-45 minute conference call with each Portfolio Engineer is conducted to review any findings. Once any corrections are made, the engineering firm signs off on the documents. Welltower's Internal Audit Department conducts the final review.

6. Recognition

When a building achieves certification, the supporting real estate management team is presented a congratulatory certificate signed by executive management. Additionally, the property receives a plaque to showcase in the main lobby (see Tools and Resources). Announcements are posted on Welltower's internal website recognizing buildings that achieved certifications. The tenant newsletter also promotes the GABC program and recommends actions to improve sustainability.

TOOLS AND RESOURCES

It is imperative to have all the right tools and resources available to truly amplify the success of the program.

- **Calculate Energy Use Intensity, Greenhouse Gas Emissions, and Water Use Intensity** – This data comes directly from [ENERGY STAR® Portfolio Manager](#)
- **Waste Diversion Rate** – A report is generated monthly by the company's third-party bill-pay and procurement consultants
- **Certificate and Plaque** – A congratulatory certificate is provided to the real estate management team supporting the certified building and a plaque indicating the level of certification achieved is placed in the building lobby.
- **Tenant Newsletters** – Tenants receive newsletters that includes a sustainability section highlighting the success of the GABC program and featuring regular tips on new sustainability initiatives. Examples of Tenant Newsletters [here](#) and [here](#).

OUTCOMES

There has been a steady, positive uptake of the program across the Welltower portfolio:

- 2014 pilot: 13 properties submitted; nine achieved certification.
- April 2015: 113 new properties submitted; 27 achieved certification.
- October 2015: 119 new properties submitted; 10 achieved certification
- April 2016: 147 properties submitted; 47 achieved certification (16 new)
- October 2016: 128 properties submitted; 22 achieved certification (13 new)

The outcomes of these submissions are used in internal and external reporting and future budgeting of energy-related projects. After the successful portfolio-wide rollout in 2015, Welltower set a goal to certify nine more buildings and improve existing GABC scores by 10 percent in 2016. The results far

exceeded that goal, with a 22.5 percent increase in scoring and an additional 29 buildings certified.

The program has been incorporated into the company-wide and new-hire training systems. As Welltower looks to further implementation of the GABC program, increased employee and tenant engagement on sustainability performance will play a key role in its success. In 2016, Welltower launched a more comprehensive tenant engagement program that taught property managers about sustainability and how to encourage/educate tenants to be more sustainable (installing occupancy sensors in offices, turning off lights and equipment at night, etc.).

Welltower's GABC program was recognized by GRESB with a case study published in September 2015. GABC was also a 2016 finalist in the IREM REME Awards Program for Workplace Environment: Sustainability Programs.

MEASURING SUCCESS

The pilot proved helpful in evaluating the level of engagement and success the program could achieve. Initial tenant engagement was effective in bringing awareness to sustainability, scoring efficiency, and providing incentives to become more sustainable and receive Green Arrow certification.

Energy, water, and waste usage is tracked monthly and reports are sent to all Real Estate Managers and Engineers for review. Any buildings with an increased usage of 5 percent or more must be reviewed in-depth for probable causes to explain variances. Increases in occupancy, the extension of physician clinic hours, and the addition of high-usage equipment such as MRIs provide additional challenges. Portfolio-wide, most of Welltower's buildings have seen reductions in energy and water ranging from 1 to 12 percent.

To drive performance improvement, buildings that do not achieve certification must go through the process every six months until a minimum Green Arrow Achiever level is met. Goals are set each year to increase average scores by a certain percentage and the number of certified buildings by a specific target. The goal for 2017 is to improve overall scoring by 6 percent and certify an additional 10 buildings.

Program support from Senior Executive Management is another way to measure the progress of company-wide sustainability goals and identify areas for further improvement. Through responsible business practices and a focus on sustainability and conservation, Welltower works to create optimal environments for care. Each year Welltower invests capital dollars towards energy-related projects resulting in a 5-to-15 percent reduction in energy and operating costs.

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