

Green Globes for Existing Buildings 2021: Approach to Healthy Buildings

With greater public awareness, buildings that are designed and operated to enhance the health and well-being of their occupants become differentiators in an increasingly green marketplace. Green Globes for Existing Buildings 2021 encourages the importance of well-being of occupants and tenants of a facility by providing criteria throughout the program that emphasize health and wellness. Several significant studies¹ conclusively show that focusing on health and wellness increases the triple bottom-line for building owners and employers.

The Green Globes rating system allocates points to meet several critical ESG goals and these are spread across the system. Project teams need to consider the various aspects that make up a sustainable building to minimize the building's impact on both the people and the planet.

Healthy buildings characteristics

Buildings should be designed and constructed to explicitly address and plan for the following parameters in the Operations & Maintenance phase:

1. Good Indoor Air Quality (IAQ) by reducing exposure to pollutants and more than adequate ventilation.
2. Providing thermal comfort.
3. Appropriate lighting and maximizing daylighting and favorable external views.
4. Providing acoustical comfort and privacy through reduced exposure to noise.
5. Maximizing water quality for both potable and non-potable uses.
6. Ensuring that there are no pests and minimizing dust with proper cleaning protocols.
7. Discouraging mold by controlling moisture and humidity, while also keeping levels optimum for comfort.
8. Eliminating exposures to toxins and contamination.
9. Site planning and spatial programming that encourages healthy activities like biking and staying physically active.
10. Encouraging healthy practices through access to clean water and nutritious food.
11. Ensuring facilities address safety and security measures both inside and outside.

¹ Harvard T.H. Chan School of Public Health. (2017). *The 9 Foundations of a Healthy Building*.

<https://9foundations.forhealth.org/>

Lassar T., Kramer A. Federman, M. Hammerschmidt, S. (2014) *Building for Wellness*. Urban Land Institute.

<https://2os2f877tnl1dvtmc3wy0aq1-wpengine.netdna-ssl.com/wp-content/uploads/ULI-Documents/Building-for-Wellness-The-Business-Case.pdf>

World Green Building council. (2014, September). *Health, Wellbeing & Productivity in Offices*.

https://www.worldgbc.org/sites/default/files/compressed_WorldGBC_Health_Wellbeing_Productivity_Full_Report_Dbl_Med_Res_Feb_2015.pdf

Advantages of healthy buildings

Better financial performance and prospects

Organizations, whether they manage one facility or a portfolio of buildings, benefit from a facility management strategy that reflects the organizational strategy of emphasis on health and sustainability.

This makes them more financially appealing to investors in the following ways:

1. A reputation for green and healthy buildings raises the overall profile of the company, retaining current investors and expanding desirability by reflecting company philosophy.
2. Obtaining a higher ESG score attracts socially responsible investors and raises more investment. Voluntary reporting and actions are considered very desirable as they show a positive approach to people and the planet.
3. In some cases, ESG reporting is mandatory and this approach to healthy buildings allows companies to show compliance.
4. Providing healthy environments reduces overall risk and liability, lowering insurance costs.
5. A proactive approach to occupant health also reduces O&M costs making the portfolio a better investment.
6. Focusing on occupant health increases user satisfaction, meeting some of the larger organizational quality goals.

In a typical company, employee costs (salaries and benefits) typically account for about 90% of business operating costs². Thus, a positive improvement in employee health, retention, or productivity can have a significant financial impact on employers. In the case of owners of commercial and multifamily properties, the positive impacts extend to occupants and increased lease retention.

Maximizing ROI

Employers and building owners share the team's goals to maximize Return on Investment (ROI) based on the lifecycle of the building. Investing in healthy buildings increases the ROI in the following ways:

1. Higher staff retention, with reduced costs on retraining and staff turnover.
2. Lower cost per employee due to reduced absenteeism and reduced medical costs.
3. Greater overall productivity due to conducive environment, leading to increase in revenue.
4. Attracting and retaining top industry talent and responsible tenants.
5. Lower resident turnover, and fewer complaints and so, better reputation during leasing season.

² World Green Building Council. (2014, September). *Health, Wellbeing & Productivity in Offices*.

https://www.worldgbc.org/sites/default/files/compressed_WorldGBC_Health_Wellbeing_Productivity_Full_Report_Dbl_Med_Res_Feb_2015.pdf

Positive occupant impact

Occupants and residents spend almost 90% of their time indoors³. Their short-term and long-term well-being is inexorably intertwined with the Indoor Environmental Quality (IEQ) of a building. Specifically, a healthy building impacts them positively in the following ways:

1. Lower incidences of eye strain and headaches.
2. Reduced fatigue and increased productivity.
3. Increased mental well-being, with lower stress and depression.
4. Reduced physical aches and discomforts like back aches and skin irritation.
5. Overall lower medical problems.
6. Increased levels of healthy activities and practices that better cardiovascular health.

Green Globes for Existing Buildings 2021's proactive approach to health

Across the rating system's 1000 points, 395 points⁴ have been allocated to improve occupant and resident health. This exhibits the importance that health and well-being play in a building's sustainability which addresses both people and the planet.

Green Globes recognizes that a healthy building hinges on the stringent Operations & Maintenance (O&M) protocols as this is when most parameters are handled with a direct impact on occupants' and residents' well-being. Without a satisfactory addressal of the O&M phase, no building can stay healthy however well it is built.

This recognition of the importance of O&M leads to the importance of complete and thorough O&M Manuals along with O&M training. So, the certification takes a proactive approach to healthy buildings with 117 points being allocated for O&M planning and management and 20 points for O&M training.

The remaining 258 points focus on IEQ and safety best practices spanning all the different characteristics of healthy buildings.

³ Mannan, M. & Al-Ghamdi, S.G. (2021, March 22). Indoor Air Quality in Buildings: A Comprehensive Review on the Factors Influencing Air Pollution in Residential and Commercial Structure. *International Journal of Environmental Research and Public Health*. 18(6):3276. <https://doi.org/10.3390/ijerph18063276>

⁴ Green Globes for Existing Buildings 2021 Healthy Building Credits. https://www.thegbi.org/content/misc/GREEN_GLOBES_EB_2021_Healthy_Buildings_Credits_-_3-21-22_-_Website.xlsx

EB 2021 allocates the following points for various aspects of healthy buildings:

Green Globes EB 2021 Area / Section / Subsection / Criteria	Points
Acoustical comfort	5
Contamination and Toxins	48
Contamination and Toxin Management	5
Healthy Practices	16
IAQ and Ventilation	53
Lighting and Daylighting	30
Location and Access to Amenities for Health and Well-Being	33
Moisture	2
O&M Plan and Management for Health and Well-Being	117
O&M Training for Health and Wellness	20
Pest and Dust Management	12
Safety and Security	11
Thermal Comfort	12
Water Quality	31
Total	395

Conclusion

Green Building Initiative urges project teams to address as many of the identified criteria as possible to build and maintain healthy buildings: the key is understanding occupant needs and comfort levels while eliminating adverse exposures and encouraging healthy practices.

Green Globes Existing Buildings 2021 offers owners a chance to manage facilities that are well-designed and sensitive to users' needs, helping occupants and residents to lead healthy lives. This, in turn, helps the owner's and employer's triple bottom line.