Building EQ

Be an Energy Genius

ASHRAE's Building Energy Quotient program takes your building to the next step beyond benchmarking.

Learn More About Building EQ:

- Visit www.ashrae.org/BuildingEQ
- For an introduction or training options, reach out to a Distinguished Lecturer for a presentation to your chapter or committee.

Benefits of Building EQ:

- Building EQ supports sustainability mandates and goals to reduce energy and carbon use by providing a consistent approach and standardized reports for an ASHRAE Level 1 Energy Audit as defined in ASHRAE Standard 211 *Standard for Commercial Building Energy Audits*
- Building EQ helps building owners/operators understand their building's current energy usages and more importantly how they can improve their building's energy performance, either through physical renovation or changes in operating practice.
- Building EQ goes beyond ENERGY STAR Portfolio Manager benchmarking by offering actionable recommendations and concrete energy conservation measures as part of the Level 1 Energy Audit.
- Building EQ helps ASHRAE members offer valuable services to their clientele through benchmarking and energy auditing along with an Indoor Environmental Quality survey with recorded measurements
- When used in conjunction with Standard 211 *Standard for Commercial Building Energy Audits*, Building EQ empowers building owners to understand the value and efficiency of their building assets and, more importantly, how they can improve their buildings' performance, reduce costs, and comply with the state's energy regulations with concrete building solutions.

Recent Updates to Building EQ:

- Three new operational carbon metrics were added to the Portal tracking total annual including total annual GHG emissions, total annual GHG emissions per square foot, and a Building EQ Carbon Performance Score (ratio of the rated building emissions to the baseline building emissions). As part of this change, Building EQ is also updating the electrical site-source conversion factors to reflect specific grid conditions rather than just one national average. The United States and Canada have been updated to date and up to 15 other countries/regions will be updated by the end of the Society Year.
- An update to the Building EQ As Designed assessment and rating was launched that uses models for both the baseline and candidate buildings. The modeling follows the performance rating method (PRM) as defined in Appendix G of ASHRAE Standard 90.1. With this change, one building simulation workflow can be used for multiple purposes, saving considerable time and effort, and improving the accuracy of the As Designed assessment.
- An Application Programming interface (API) has been developed for the Portal and should be available for use by the end of the 2022-23 Society Year. The Building EQ Committee is currently seeking use cases for the API. (Contact BuildingEQ@ashrae.org)

- The spreadsheet audit report is now available for all users and all projects for the $50 fee. The Portal auto-populates this ASHRAE Standard 211 compliant Excel spreadsheet report based on the information entered into the Portal.
- A search function has now been added to the Energy Efficiency Measures (EEM) pull down menus under the EEM Tab. This allows you to quickly search the list based on key words.
- A sample project is now added to each new account to allow new users to test and experiment with the Portal before launching their first project.
- An alternate label report bringing back the old letter grades was added as an option for users who looking for a more defined rating approach.
- Both French and Spanish versions of the Portal are available for use by users.

Building EQ in Green Globes:

- The Green Building Initiative's (GBI) Green Globes rating systems for new construction and existing buildings have recently added alternative pathways for project teams who prefer to use ASHRAE Building EQ as an alternative to ENERGY STAR® and/or other benchmarking processes. This represents an opportunity to provide users with more options that make sense for their building.
- Green Globes for New Construction 2021 (NC 21) has adopted ASHRAE Building EQ As Designed for international projects to evaluate building energy performance based on energy modeling inputs. Point scoring within Green Globes NC 21 begins with 10 points for an 85 As Designed score, up to a maximum of 180 points for a 50 or lower score – potentially 18% out of all points available in Green Globes NC 21.
- Green Globes for Existing Buildings 2021 (EB 21) adopted ASHRAE Building EQ In Operation for use by all existing commercial buildings to benchmark against the median performance of existing US buildings of similar building use, normalized by climate and occupancy. Point scoring begins with 6 points for an 85 In Operation score, up to a maximum of 100 points for a 50 or lower score – potentially 10% out of all points available in Green Globes EB 21.
- Both pathways require project teams to complete the Building EQ certification and provide the resulting label to their assigned third-party Green Globes Assessor for verification to achieve their respective points. Technical Manuals for both Green Globes NC 21 and Green Globes EB 21 include expanded guidance describing how the ASHRAE Building EQ scores are calculated using the methodology to establish benchmarks based on ANSI/ASHRAE/IES Standard 100-2015 using methodologies developed at Oak Ridge National Laboratory (ORNL). The Building EQ scoring system is also described in detail within the technical manuals' assessment guidance, including a sample ASHRAE Building EQ label and Building Performance Score.

For additional information on the benefits of Building EQ,
please visit www.ashrae.org/Building EQ
or email BuildingEQ@ashrae.org