The Bala Sustainability Index

Consolidated Sustainability Benchmarking and Monitoring for New Construction & Major Building Renovations

BALA sustainability index[™] Confidential Project



The **Bala Sustainability Index[™]** (BSI) compiles the most important metrics in the industry today regarding sustainability and community impact into a single view for new construction or major renovations on buildings that are 20,000 sq. ft. or more.

Until now, it has been difficult for building owners/ developers to get a consolidated view of major sustainability metrics on their projects. Bala's proprietary snapshot gives owners and design teams a holistic view of a building's green initiative baselines and shows how it evolves over the lifecycle of a project to highlight the effect of design decisions.

Who Should Use the BSI

Data center applications are leading the use of the BSI to help with industry transparency and community engagement for new construction. Additionally, any large public company with an ESG reporting plan will likely be required to report emissions and climate action to the SEC for compliance.

The Index is Tailored to Your Goals & Evolves as the Project Progresses

Bala provides clients with an initial sample of the BSI at the conclusion of the Concept or Schematic Design Phase. Updates are incorporated through the Design Development and Construction Documents phases as part of Bala's full suite of services. A final version will be issued after design completion.



"We use the Bala Sustainability Index because it places the primacy on transparency around the metrics and indices that are important for sustainable development."

Karen Petersburg VP | Data Center Development & Construction American Real Estate Partners

Understanding the Index

Energy Use Intensity (EUI)

EUI is the measure of annual energy per square foot of building space. This metric is used to compare buildings of the same type but different sizes to better understand energy efficiency in various building verticals. EUI is calculated via energy modeling on our "Model Comparison Matrix."

Operational Carbon Intensity (OCI)

Operational carbon is the annual greehouse gas emissions that are associated with operating a building. These emissions come directly from burning fossil fuels onsite (like natural gas or fuel oil) or purchasing energy such as electricity or steam. OCI is also based on an energy model or upfront box modeling.

Embodied Carbon Intensity (ECI)

Embodied carbon emissions come from the full life cycle of a building and its components. It is tracked from raw material extraction, through manufacturing, construction, use, and end life. Most commonly embodied carbon is measured taking into account a buildings structure, foundation and enclosure. Despite being a low proportion of the total carbon emissions, this carbon is irreversibly emitted at the start of a project. ECI estimations come from upfront box modeling or from conducting a whole building life cycle assessment (WBLCA) during the design process.

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High Impact Goals

There are additional areas for monitoring that can make a significant impact on understanding the overall sustainability of a building. Setting goals up front for refrigerants, lighting power density, renewable energy, water reduction and climate risk assessments can all contribute to the success of a project's sustainability initiatives.

Additional Indices

Additional, industry-specific metrics can also be included. For example, in data centers Power Usage Effectiveness (PUE) is a critical metric to understand and can be included in the Index. The BSI's data categories are customizable to the client's specific goals for each building.

For more information on the BSI or other sustainability services please contact:

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