Green Buildings!

Myrrh Caplan
National Sustainability Director
Skanska
Owners + Green Buildings

Skanska Purpose: We build for a better society.

Green buildings are a COMPETITIVE DIFFERENTIATOR

Green buildings with lower operating costs and better indoor environmental quality are more attractive to a growing group of corporate, public and individual buyers. Green features will increasingly enter into tenants' decisions about leasing space and into buyers' decisions about purchasing properties and homes. - USGBC
Tenants + Green Buildings

The Why:

The #1 reason is/should be that 90% of the tenant company costs are employee-related and increasing productivity and decreasing turnover equals greater financial outcomes.

Green buildings mean HAPPIER EMPLOYEES AND OCCUPANTS

Green buildings are designed to have healthier, cleaner indoor environments, which mean health benefits for occupants. Green buildings are also demonstrating improved recruitment and retention rates and increased productivity benefits for employers.

- USGBC
A study in 2016 found that “employees in green-certified buildings scored 26 percent higher on cognitive function tests (controlling for annual earnings, job category and level of schooling) and had 30 percent fewer sick-building symptoms than those in noncertified buildings.”

HR Magazine, Why Green Building Matters for HR (Harvard study)
Beyond Green Building: Value + Values

- Occupants
- Environment
- Community
- Infrastructure
- Buyer
“Skanska’s 101 Seaport represents the leadership in innovation, sustainability, and business that have become synonymous with the City of Boston and our business community.”
Former Boston Mayor – Thomas M. Menino

101 Seaport
101 Seaport: Chilled Beams
101 Seaport: Triple Glazing
101 Seaport: Operational Efficiency

- Chilled Beam
- Triple Glazing
- Tenant Guidelines
- Metering
- Advanced BMS

Potential of over 50% cost savings from energy use reduction

<table>
<thead>
<tr>
<th>Metric</th>
<th>Design Project</th>
<th>Median Property</th>
<th>Estimated Savings</th>
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</thead>
<tbody>
<tr>
<td>ENERGY STAR Score (1-100)</td>
<td>96</td>
<td>50</td>
<td>N/A</td>
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<tr>
<td>Energy Reduction (from Median)(%)</td>
<td>-56.65</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Source Energy Use Intensity (kBtu/ft2/yr)</td>
<td>110</td>
<td>255</td>
<td>145</td>
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<tr>
<td>Site Energy Use Intensity (kBtu/ft2/yr)</td>
<td>37</td>
<td>86</td>
<td>49</td>
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<tr>
<td>Source Energy Use (kBtu/yr)</td>
<td>50,492,860</td>
<td>116,411,320</td>
<td>65,918,460</td>
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<tr>
<td>Site Energy Use (kBtu/yr)</td>
<td>17,100,047</td>
<td>39,426,700</td>
<td>22,326,653</td>
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<tr>
<td>Energy Costs ($)</td>
<td>652,876</td>
<td>1,505,304</td>
<td>852,428</td>
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<tr>
<td>Total GHG Emissions (Metric Tons CO2e)</td>
<td>1,601</td>
<td>3,691</td>
<td>2,090</td>
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</tbody>
</table>
101 Seaport: Tenant-oriented

What used to be a surface parking lot now promotes wellness, the use of mass transit, and the enjoyment of outdoor habitat. A tree-lined public open space has been created at the building’s base with a wide pedestrian retail promenade. An expansive gym, bike storage area, showers, and beautiful views add to the health of occupants.
Georgia Tech: Kendeda Building for Innovative Sustainable Design
The Kendeda Fund and the Georgia Institute of Technology are collaborating on a landmark project.

We aim to create the most environmentally advanced education and research building on a college campus in the Southeast. And we’re leveraging our enterprise to guide others across the region toward more sustainable materials and processes.

In September 2015, Georgia Tech and Kendeda announced plans to design and construct the first building in Georgia certified under the Living Building Challenge — the world’s most rigorous green-building certification standard. Kendeda is funding the entire project with its largest single grant ever: $25 million for design and construction, and another $5 million for support activities.
Georgia Tech: Living Building
Georgia Tech: Living Building
Thank you!