GREEN LEASING TASK GROUP

Recommendations and development of model commercial leasing provisions

November 17th, 2016
Victor Olgyay, RMI
GOALS & PRODUCTS

- Recommend model commercial leasing provisions
  - Meet Energy Efficiency Improvement Act of 2015
  - Encourage leasing marketplace to supply greener buildings
- Submit “Advice Letter” to GSA
  - Apply nationwide
APPROACH

• Clear, simple, useful, enforceable, practical, implementable, cost-effective, and broadly applicable.

• Align interests of building owners and tenants
  • Encourage buildings owners and tenants to collaborate
  • Accelerate Zero Net Energy and other highly efficient buildings development and leasing

• Encourage adoption of GSA relevant sustainability goals in commercial buildings

• Carefully created by the GLTG and shared with over 20 industry players for input and review.

• Integrated with emerging EPA TenantStar effort and many parallel efforts (listed in the ‘Resources’ section)
# Align Benefits of Green Leases

<table>
<thead>
<tr>
<th>Potential Benefits to Tenants</th>
<th>Potential Benefits to Landlords</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lower energy, water and operating costs</td>
<td>• Increasing transparency, building trust with tenants, reducing turnover</td>
</tr>
<tr>
<td>• Providing a healthier, more productive workplace</td>
<td>• Reducing vacancy</td>
</tr>
<tr>
<td>• Supporting corporate sustainability goals</td>
<td>• Faster lease-up</td>
</tr>
<tr>
<td>• Demonstrating environmental responsibility to employees and the community</td>
<td>• Enhancing marketability of the building</td>
</tr>
<tr>
<td></td>
<td>• Lower operating costs which can improve building financial performance/Net Operating Income (NOI)</td>
</tr>
</tbody>
</table>
POTENTIAL IMPACT

• Reduce energy consumption by 11-22%
• Lower US utility expenditures ≤$0.51/ft²
• Provide leased US office market $1.7B-$3.3B annual cost savings.
• Effectiveness determined by lease adoption rate.

Chart based on RMI internal analysis, 2016
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>Green Leasing Task Group Formed</td>
</tr>
<tr>
<td>March – April</td>
<td>Weekly Meetings of the GLTG</td>
</tr>
<tr>
<td>April 28 2016</td>
<td>Presentation to GBAC</td>
</tr>
<tr>
<td>June – August</td>
<td>Further Development of Framework</td>
</tr>
<tr>
<td>September</td>
<td>Review by Key Commercial Leasing Contacts</td>
</tr>
<tr>
<td>October</td>
<td>Incorporate Concepts into Lease Template</td>
</tr>
<tr>
<td>November 17 2016</td>
<td>Final Recommendations with GBAC</td>
</tr>
</tbody>
</table>
GREEN LEASE GUIDANCE DOCUMENT - OVERVIEW

0. Introduction, value, how to use

Summary Matrix: 3 tiers of performance
- Simple lease, Standard Lease and Superstar Lease
- Green highlighted cells indicate high priority criteria
- 5 categories of criteria:
  1. Shared savings and commitments
  2. Energy usage and greenhouse gas emissions management
  3. Water usage and landscape management
  4. Indoor environmental quality management and operations
  5. Transportation

6. Sample lease clauses
7. Resources (links to other green lease info)
0. INTRODUCTION

- **Purpose:** Advance effective green building practices among commercial office landlords as well as public, private and non-governmental organization sector tenants.

- **Ultimate goal:** is to increase the supply of green office buildings for GSA and other tenants to lease.

- **Strictly voluntary**

- **3 tiers of performance**
  - Simple criteria - widely attainable, small tenants, partial floor leases, tertiary markets.
  - Standard criteria – applicable to most leases across US, major and secondary markets in class A and B buildings
  - Superstar criteria - well beyond standard practice, the most innovative and advanced

- **Pick and choose individual levels of each criteria** – not a one size fits all

- **Value to both tenant and landlord parties**

- **Suggestions on how this material can be applied**
# GREEN LEASE GUIDANCE DOCUMENT – I. SHARED SAVINGS

<table>
<thead>
<tr>
<th>Shared savings and commitments</th>
<th>Simple Lease</th>
<th>Standard Lease</th>
<th>Superstar Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>S1a</strong></td>
<td><strong>S1b</strong></td>
<td><strong>S1c</strong></td>
</tr>
<tr>
<td></td>
<td>Partial floor leases or tertiary markets, Class A, B and C</td>
<td>Most common leases, major and secondary markets, Class A and B, full floor tenants.</td>
<td>Highly ambitious tenants/landlords, innovative applications</td>
</tr>
</tbody>
</table>
|                               | Conduct regular meetings between landlords and tenants to discuss efficiency opportunities and annual reporting | Include clause for landlord cost recovery for efficiency related capital improvements | Identify and implement all efficiency measures deemed cost effective (with “cost-effective” being defined as a payback period within the tenant’s current lease term or some other period of time that is mutually acceptable).  


# 2. Energy Usage and GHG Emissions Management

<table>
<thead>
<tr>
<th>E1a</th>
<th>Achieve and maintain during the lease term ENERGY STAR labeling for the building (a score of 75 or higher)</th>
<th>E1b</th>
<th>Comply with E1a and provide periodic recommissioning thereafter (e.g. Every 3 years)</th>
<th>E1c</th>
<th>Aspire to net zero energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2a</td>
<td>Install Lighting Power Density (LPD) to comply with ASHRAE 90.1 2013 standard, at a minimum</td>
<td>E2b</td>
<td>Comply with E2a and add lighting controls to adjust to occupancy/vacancy and take full advantage of daylight.</td>
<td>E2c</td>
<td>n/a</td>
</tr>
<tr>
<td>E3a</td>
<td>Share whole building or tenant space energy use (either actual or estimated)</td>
<td>E3b</td>
<td>Comply with E3a and sub meter electricity use per tenant</td>
<td>E3c</td>
<td>Comply with E3a, b and sub meter energy use for major energy end uses (e.g. heating, cooling, lighting, plug loads).</td>
</tr>
<tr>
<td>E4a</td>
<td>Use ENERGY STAR certified equipment for all copiers and printers, with space heaters banned.</td>
<td>E4b</td>
<td>Comply with E4a and set and maintain automatic controls (night setbacks, sleep modes) for office equipment</td>
<td>E4c</td>
<td>Comply with E4a and b, and provide ENERGY STAR certified equipment for all central HVAC equipment, computers, monitors, displays and appliances</td>
</tr>
<tr>
<td>E5a</td>
<td>Tenant plug load demand as required in the lease is limited to 3.5 watts/SF (i.e. the wattage available for equipment that is literally plugged into the electrical sockets)</td>
<td>E5b</td>
<td>Tenant plug load demand as required in the lease is limited to 2.5 watts/SF</td>
<td>E5c</td>
<td>Tenant plug load demand as required in the lease is limited to 1.5 watts/SF</td>
</tr>
<tr>
<td>E6a</td>
<td>n/a</td>
<td>E6b</td>
<td>Green power purchasing or Renewable Energy Credits (RECs) for 50% of tenant or whole building energy use</td>
<td>E6c</td>
<td>Green power purchasing or Renewable Energy Credits (RECs) to offset 100% of tenant or whole building energy use</td>
</tr>
</tbody>
</table>
## 3. WATER USAGE AND LANDSCAPE MGMT.

<table>
<thead>
<tr>
<th>Water usage and landscape management</th>
<th>Simple Lease</th>
<th>Standard Lease</th>
<th>Superstar Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1a</td>
<td>Use Water Sense fixtures for common area fixtures (or verify flow rates comply)</td>
<td>Comply with W1a and use Water Sense fixtures for tenant space fixtures (or verify flow rates comply)</td>
<td>Comply with W1a and b.</td>
</tr>
<tr>
<td>W2a</td>
<td>Share whole building or tenant space water use (either actual or estimated)</td>
<td>Comply with W2a and separately sub-meter indoor from outdoor water use</td>
<td>Comply with W2a and b.</td>
</tr>
<tr>
<td>W3a</td>
<td>Use climate appropriate native and/or adapted landscape vegetation (where appropriate)</td>
<td>Comply with W3a and, where irrigation is provided, use smart irrigation controller systems, with hydrozoning of areas of plants designated to be irrigated</td>
<td>Comply with W3a and b, and eliminate potable water use for irrigation</td>
</tr>
<tr>
<td>Indoor environmental quality management, and operations:</td>
<td>Simple Lease</td>
<td>Standard Lease</td>
<td>Superstar Lease</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
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</tr>
<tr>
<td>Q1a Use low-emitting building products that are third party certified. Tenant/landlord to provide product content information to the other party.</td>
<td>Q1b Comply with Q1a and use 50% low-emitting furniture that is third party certified. Tenant/landlord to provide product content information to the other party.</td>
<td>Q1c Comply with Q1a and 95% low-emitting furniture that is third party certified. Tenant/landlord to provide product content information to the other party.</td>
<td></td>
</tr>
<tr>
<td>Q2a Provide individually controlled, efficient task lighting. (i.e. LED)</td>
<td>Q2b Comply with Q2a and provide adequate spaces for occupant use that provide acoustical control and privacy</td>
<td>Q2c Comply with Q2a and b and provide individual thermal comfort control.</td>
<td></td>
</tr>
<tr>
<td>Q3a Regularly scheduled filter replacement (min. 4x/yd); minimum of MERV 8 filters and ASHRAE 170 for healthcare settings.</td>
<td>Q3b Regularly scheduled filter replacement (min. 2x/yd); minimum of MERV 11 particulate filters and ASHRAE 170 for healthcare settings.</td>
<td>Q3c Comply with Q3a and b, and provide at least 10% clean air distribution rate above ASHRAE 62.1 or equivalent using the ASHRAE 62.1 IACP and ASHRAE 170 for healthcare settings.</td>
<td></td>
</tr>
<tr>
<td>Q4a Implement a green cleaning program and include training for cleaning/facilities staff</td>
<td>Q4b Comply with Q4a</td>
<td>Q4c Comply with Q4a and include product content information.</td>
<td></td>
</tr>
<tr>
<td>Q5a Implement a waste management plan, including recycling. Include training for occupants and cleaning/facilities staff</td>
<td>Q5b Comply with Q4b and implement a periodic electronics recycling event/plan</td>
<td>Q54c Comply with Q5a, b and implement a waste management plan including composting</td>
<td></td>
</tr>
<tr>
<td>Q6a Develop an Integrated Pest Management Plan</td>
<td>Q5b Comply with Q5a</td>
<td>Q5c Comply with Q5a</td>
<td></td>
</tr>
</tbody>
</table>
# Green Lease Guidance Document – 5. Transportation

<table>
<thead>
<tr>
<th>Transportation</th>
<th>Simple Lease</th>
<th>Standard Lease</th>
<th>Superstar Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T1a</strong></td>
<td>Landlord provides a building-wide transportation management plan (TMP)</td>
<td><strong>T1b</strong> Comply with T1a and landlord and tenant work together to implement at least one alternative transportation solution (see Sample Clauses below for options)</td>
<td><strong>T1c</strong> Comply with T1a and landlord and tenant work together to implement three alternative transportation solutions (see Sample Clauses below for options)</td>
</tr>
</tbody>
</table>
6. SAMPLE GREEN LEASE CLAUSES

- Each category has industry vetted language that can be inserted directly into leases
- Detailed footnotes provide notes on the importance, industry research and additional resources

Energy usage and greenhouse gas emissions management

E1a: Achieve and maintain ENERGY STAR labeling for the building
The building must be ENERGY STAR labeled by achieving an ENERGY STAR rating of 75 and ENERGY STAR certification must be maintained for the duration of the lease term:
- In buildings where an ENERGY STAR rating cannot be obtained (i.e. because the building is too new to have a sufficient operating history to generate the requisite data or because the building’s vacancy exceeds the vacancy allowed for an ENERGY STAR label), a lease may include the provision that the landlord has one year after the building reaches the requisite threshold in operating history and/or occupancy to achieve the ENERGY STAR label. In general, any building over 5,000 psf with a year of utility bills can get an ENERGY STAR score (exceptions and details).
- If an ENERGY STAR rating is not available for the reasons identified above, the landlord must show it has implemented all cost-effective energy upgrades.
- Tenant shall collaborate with landlord to incorporate efficiency into energy-using equipment, e.g., by using ENERGY STAR-labeled equipment, and optimize its operating schedules, e.g., by not operating during non-standard business hours without paying the incremental cost.

Alternate: In the initial lease, where no previous energy use data is available, the parties shall construct an estimate of potential future energy usage by the tenant using such principles and data as can be agreed upon. Upon the accrual of a sufficient number of years of energy use data for the structure, the Parties/Landlord shall themselves or through a third party conduct an overall energy assessment based on the usage history to determine overall usage rates, trends, time sensitive usage patterns (if metered to that level), and other relevant data. The Parties will then meet to review the usage data and identify patterns and trends, and compare the results to the original projected usage projections. The parties will then discuss any lease modifications or other energy related modifications/changes to the premises that may be suggested from or supported by the data, towards an overall review of the level of energy and cost savings relevant to the original lease rates for the property.
GREEN LEASE GUIDANCE DOCUMENT – 7. ADDITIONAL RESOURCES

- Additional information on third party emissions standards for low emitting materials
- List of 18 other related resources
  - Better Buildings Partnership
  - Boston Bar Association Green Lease Guide
  - California Sustainability Alliance Lease Provisions
  - Green Globes®
  - Green Lease Library
  - GSA Lease
  - IMT Green Lease Impact Study
  - LEED®
  - New York University Green Leasing Guide
  - NYC Energy Aligned Clause
  - Pennsylvania Lease Specs
  - REALPac Green Lease Guide
  - Sydney Better Buildings
  - Tenant Star
  - Tower Companies Green Lease Implementation Model
  - WELL Building Standard
  - Working Together for Sustainability: The RMI-BOMA Guide for Landlords and Tenants
GREEN BUILDING ADVISORY COMMITTEE (GBAC) GREEN LEASING TASK GROUP (GLTG) MEMBERS AND DESIGNEES

- Charlene Bayer, Hygieia Sciences LLC (Co-chair)
- Victor Olgyay, Rocky Mountain Institute (Co-chair)
- Amy Costello, Armstrong World Industries
- Jonathan Herz, Department of Health and Human Services
- Greg Kats, Capital E
- Jane Rohde, JSR Associates
- Drake Wauters, AIA Technical Design for Building Performance

GSA & Contractor Attendees
- Ken Sandler, Designated Federal Officer (OFHPGB)
- Phyllis Carr, GSA Public Buildings Service (PBS)
- Kevin Funk, GSA Office of Government-wide Policy (OGP)
- Donald Horn, OFHPGB
- Kevin Kampschroer, Chief Sustainability Officer and Director, OFHPGB
- Alexandra Kosmides, GSA PBS Office of Leasing
- Ken Schelbert, GSA PBS Office of Leasing
- Alexandra Kosmides, GSA PBS Office of Leasing
- Kathy Nguyen, Noblis
- Gus Nielsen, Noblis
- Ken Schelbert, GSA PBS Office of Leasing
- Robin Snyder, GSA PBS

Observers
- Alysson Blackwelder, U.S. Green Building Council
- Jeff Bradley, American Wood Council
- Cassandra Duncan, U.S. Department of the Interior
- Andrew Feierman, Institute for Market Transformation
- Jenna Hamilton, GBI
- Michael Hetchkop, Cresa
- Cara Carmichael, Rocky Mountain Institute
- Robert Klipfel, DHS
- Jessica Long, JBG Companies
- Laurie McMahon, Cushman Wakefield
- Sonya Reinhardt, PwC
- Adam Sledd, Institute for Market Transformation
- Steve Teitelbaum, Washington Metropolitan Area Transit Authority
- Doug Wheeler, LMI
- Vicki Worden, GBI
INDUSTRY REVIEWERS

- Henry Chamberlain, BOMA
- Duane Desiderio, Real Estate Roundtable
- Jeanette Flory, Bentall Kennedy
- John Forester, The RMR Group
- Charlotte Matthews, Related
- Jason McIntyre, USAA Real Estate Company
- Emily Naden, BOMA International
- Robert Scott, Indiana Bureau of Motor Vehicles
- Kurt Stout, Colliers
- Brenna Walraven, Corporate Sustainability Strategies
GROUP DISCUSSION – SCALING AND NEXT STEPS

• Questions or suggestions?

• To increase impact, how can we (GSA and GBAC) encourage broad distribution? For example, can we get this in the hands of the many small to mid-sized tenants who are not likely as versed in sustainability but who may benefit from it most

• How can we encourage adoption by leasing brokers and agents?

• How should we leverage the powerful network of key industry stakeholders established through this work? i.e. direct integration into portfolios? Outreach and conference presentations? Ongoing engagement with Tenant Star or other efforts?
DRIVERS

Committee 10/28/15 Motion:
• “Create a task group to provide recommendations to improve Federal government leasing language and requirements regarding NZE [net zero energy] and other sustainability goals.”

Energy Efficiency Improvement Act (EEIA) of 2015
• Requires GSA to develop model commercial leasing provisions
• Allows GSA to use modeling leasing provisions
• Requires EPA to develop Tenant Star program within Energy Star

Alignment with standards
• Guiding Principles, Rating systems, etc.
POTENTIAL IMPACT

- Reduce energy consumption by 11-22%
- Lower US utility expenditures ≤$0.51/ft²
- Provide leased US office market $1.7B-$3.3B annual cost savings.
- Effectiveness determined by lease adoption rate.

Chart based on RMI internal analysis, 2016
## GSA LEASED INVENTORY

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Leases</td>
<td>8,483</td>
</tr>
<tr>
<td>Number of Buildings</td>
<td>6,892</td>
</tr>
<tr>
<td>Leased Rentable Square Feet</td>
<td>195.27 Million rsf</td>
</tr>
<tr>
<td>Average Size Lease</td>
<td>23,019 rsf</td>
</tr>
<tr>
<td>Median Size Lease</td>
<td>8,088 rsf</td>
</tr>
<tr>
<td>Median Rent</td>
<td>$24.20</td>
</tr>
<tr>
<td>Geographic Distribution of Leases**</td>
<td></td>
</tr>
<tr>
<td>49% in Large Towns (Pop = 500K +)</td>
<td>12% in Mid-Sized Towns (Pop. = 200 – 499K) 39% in Small Towns (Pop.&lt;200K)</td>
</tr>
<tr>
<td>Percentage of Government Tenancy Within Leased Building</td>
<td></td>
</tr>
<tr>
<td>In 23% of (#) Leases, GSA = 95–100% Tenant</td>
<td></td>
</tr>
<tr>
<td>In 16% of (#) Leases, GSA = 26-94% Tenant</td>
<td></td>
</tr>
<tr>
<td>In 61% of (#) Leases, GSA = &lt;25% Tenant</td>
<td></td>
</tr>
</tbody>
</table>