

# **Bloomberg LP**

## **Sustainable Operating Guidelines**

June 2019

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## **INTRODUCTION**

The primary objective of Bloomberg's sustainability strategy is to decouple the Company's growth from environmental impact, while proving the business case for sustainable operations. The purpose of Bloomberg's Sustainable Operating Guidelines is to detail the operational processes which the Bloomberg Sustainable Business & Finance team (SBF) jointly developed with internal departments to address sustainability issues throughout the organization.

All plans and policies included in the Sustainable Operating Guidelines offer goals, responsibility, and ongoing tracking metrics.

### **Goals**

All goals represent quantitative or qualitative achievements that demonstrate compliance with the guidelines.

### **Responsibility**

Identifies persons and/or departments responsible for implementing policies/processes in the guidelines. Responsible parties will identify specific team members that should be considered "owner(s)" of each Guideline.

As individuals in roles or departments shift, the responsible department will ensure that all relevant team members are aware of and appropriately trained in applicable Sustainable Operating Guidelines. The responsibility section may also outline the boundary of the guideline as needed.

### **Ongoing Tracking Metrics**

To ensure that goals are being met, the responsible parties must work with vendors or internal team members to report on the ongoing tracking metrics as required in the guideline. On an annual basis, all tracking metrics should be reported to the Sustainable Business & Finance team.

## FACILITY ENERGY MANAGEMENT

<b>Context</b>	Bloomberg is committed to reducing the environmental impacts of facility operations by reducing energy consumption, making strategic energy efficiency improvement decisions, providing transparency into energy performance data throughout the year, and sourcing both on and off-site renewable energy while ensuring its facilities are reliably served with appropriate emergency backup.
<b>Goals</b>	<ul style="list-style-type: none"><li>✓ Ensure energy reliability at all global facilities</li><li>✓ Implement performance tracking/reporting system to monitor performance throughout the year</li><li>✓ Devise and execute an energy assessment schedule and strategy</li><li>✓ Perform commissioning on all new sites and buildouts</li></ul>
<b>Responsibility and Boundaries</b>	Bloomberg's Energy Management Guidelines apply to most stakeholders within the company, in that all employees consume energy. Most closely, however, the Facilities (specifically Mechanical Electrical Plumbing (MEP)/Infrastructure, Construction), Purchasing, and Sustainability departments will all play pivotal roles in the successful implementation and ongoing use of these guidelines.
<b>Ongoing Tracking Metrics</b>	The following metrics shall be tracked and reported on annually by the Facilities Department to ensure compliance with the Facility Energy Management Guidelines <ul style="list-style-type: none"><li>▪ Reliability assessment of all new and existing sites</li><li>▪ Data tracking for all sites – via Electrical Power Monitoring System (EPMS) and/or Utility Bill Management System (NUS) (detailed below)</li><li>▪ Multi-level performance indicators per asset allocation</li><li>▪ Energy assessment schedule and implementation</li></ul>

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Bloomberg's Facility Energy Management Guidelines are broken down into five primary categories:

1. **Reliability**

Assess the reliability of local power providers as part of all new site selections; perform similar assessment on a periodic basis for all existing sites in any high-risk locations.

2. **Goal Commitment**

Contribute to Bloomberg's GHG emissions reductions goal by making energy reduction a priority; set target energy intensities for various facility types (data centers, major offices, news bureaus).

3. **Data Tracking and Reporting**

Track energy consumption data across all facilities globally; utilize existing tracking systems EPMS (data centers) and NUS (site locations) to generate quarterly reporting metrics to give insight into performance; build asset energy allocation structure to establish accurate, multi-level performance indicators.

4. **Engineering and Upgrades**

Implement commissioning requirements following the globally recognized BCxA or ASHRAE standards on all new construction projects (regardless of LEED certification); establish a protocol for regular energy assessments (internal or external) following ASHRAE Level I, II, and III guidelines; identify sub-meter requirements for all facilities.

#### 5. **Facility Equipment Standards**

Establish standard criteria to assess equipment upgrades; ensure that incentives are utilized whenever applicable; implement minimum energy efficiency standards for ENERGY STAR rated equipment and appliances.

#### Reliability

1. Categorize the most frequently identified reliability issues within past sites (i.e. local utility reliability, lack of backup power, lack of multiple power feeds, etc.).
2. Identify specific high-risk regions where reliability may be a more relevant issue (ex. India, Africa, etc.)
3. Perform a due diligence assessment of all potential new sites to include:
  - a. Building manager interviews
  - b. Publicly available utility data
  - c. Availability of multiple power feeds
  - d. Access to backup power source
4. Create a log to track specific reliability issues/concerns at existing sites
5. Consider a pilot program for micro-grid strategies in incentive-supported regions, such as in California and New York, and apply principles from these into less reliable regions

#### Goal Commitment

1. These guidelines are created, adhered to, and continually amended to align with Bloomberg's GHG emissions reduction goal. It is imperative to make a commitment to the goal as one of the preliminary steps.
  - Commit to making energy reduction a priority to align with Bloomberg's 20% GHG emissions reduction goal; set target energy intensities for various office types based on historic usage (data centers, major offices, news bureaus).
2. The remaining sections of this guideline are designed to align with Bloomberg's GHG emissions reduction goal and are based around the following principles:
  - a. Baseline current performance
  - b. Track energy consumption on a regular, ongoing basis
  - c. Develop a framework for identifying exceptional and low performers, as well as outliers
  - d. Designate a schedule to perform energy assessments
  - e. Set guidelines for efficient equipment and metering upgrades

### Data Tracking and Reporting

Bloomberg utilizes two very important ongoing data tracking systems for its facilities. The Electrical Power Monitoring System (EPMS) monitors power in real time of its critical data facilities. The NUS system is utilized to consolidate monthly bill-level consumption and cost data.

#### ***EPMS (Electrical Power Management System) – in all applicable sites***

1. Ensure that alerts are set up appropriately to alarm monitoring team of spikes or drops in energy or temperature within critical data facilities
2. Maintain non-proprietary communication protocol to avoid any dark points in monitoring
3. Ensure metering infrastructure separates cooling/lighting loads from technology loads, where applicable
4. Create standard daily/monthly/quarterly reports that assess performance and identify trends/outliers

#### ***NUS (Utility Bill Management)***

1. Ensure monthly consumption and cost values are accurately entered each month
  - a. When possible, compare monthly values to prior month and prior year to help detect anomalies (manually or automatically)
  - b. Flag values for further investigation that vary by more than 10%, higher or lower
2. Develop asset energy allocation structure
  - a. Characterize assets
    - i. Offices
    - ii. News Bureaus
    - iii. Data Centers
    - iv. A/V Studios
  - b. Inventory specialized loads
    - i. MDF/IDF Rooms, Nodes, Data centers, Printing equipment, Studios
  - c. Identify normalization factors
3. Create a quarterly reporting framework to highlight performance of the larger sites (current vs. prior quarter/year) (see image 1)
  - a. Total energy consumption (in kWh)
  - b. Total energy intensity (in kWh/sq.ft.)
  - c. Total energy intensity (in kWh/FTE)
  - d. Total energy intensity by revenue/terminal
  - e. Establish weather normalization methodology
    - i. To include heating and cooling degree days

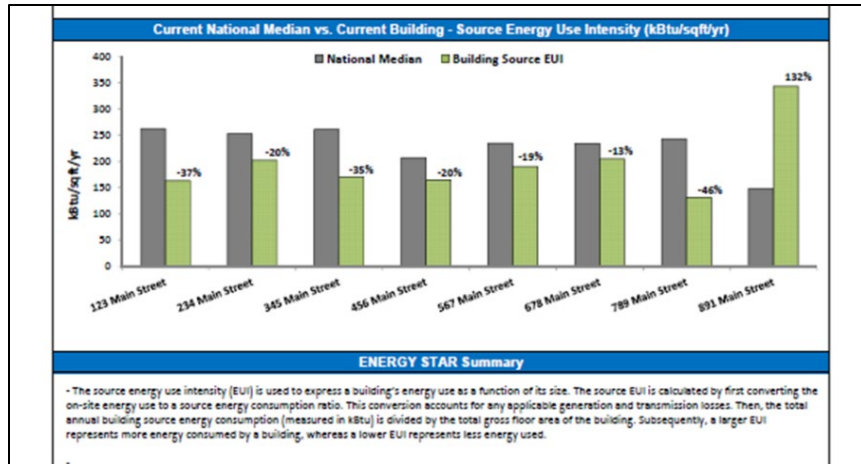


Image 1. Sample Performance Reporting Output

4. Identify sites with insufficient metering for potential meter upgrades
  - a. Product of specialized load inventory
5. Identify sites with decreasing performance for further investigation
  - a. Establish criteria for underperformance
    - i. Standard load EUI Threshold
    - ii. Specialized load EUI Threshold
      1. Specialty normalization factors (i.e. per magazine produced, active studio hours / studio revenue output)
    - iii. Establish "Infrastructure Score" to properly allocate energy audits and retro-commissioning studies.
      1. Typically based on age of major energy consuming equipment within a space.
        - a. Ex. A space with a poor EUI and high infrastructure score, performance RCx (see image 2 below)

6. Identify sites with increasing performance for further recognition

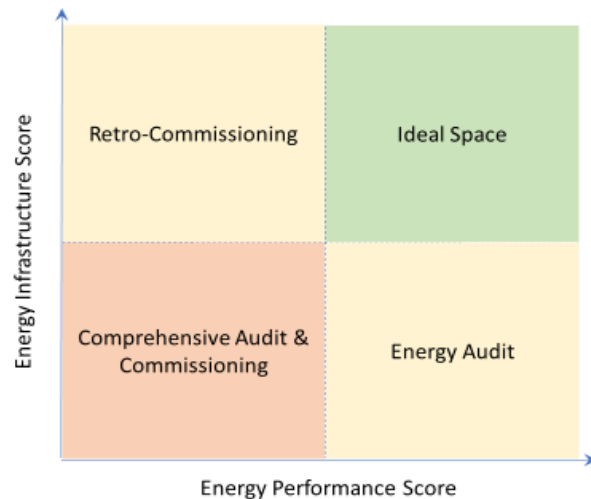


Image 2. Performance vs. Infrastructure Matrix for Energy Assessments

Engineering and Upgrades

A key part of the guidelines involves engineering topics related to proper commissioning of new equipment and periodic assessments of facilities.

**Commissioning of Mechanical and Electrical Equipment**

1. New equipment installations or retrofits shall be commissioned, in line with current LEED practices. This relates both to new sites pursuing LEED certification as well as those simply building to the LEED guidelines. Globally recognized Building Commissioning Association (BCA) guidelines should be used as a best practice.

**Site Energy Assessments**

1. An annual schedule of conducting energy assessments should be implemented across all facilities of 50 or more people (based on infrastructure score methodology). An energy assessment is a great way to assess energy performance and can be done in several ways:
  - a. Internal energy audits can be conducted by an internal team and can be general in nature or focus on specific systems (such as lighting or plug load strategies) across all sites. These can also be done in conjunction with an internal engagement campaign, such as forming a task force to perform an energy treasure hunt.
  - b. External energy audits may require the help of an experienced energy auditor to look at more complex systems and operations. These types of audits will generally look much more closely at the energy consuming equipment, while putting calculations and assumptions to any proposed energy conservation measures.
  - c. Re-commissioning, or retro-commissioning, can be conducted periodically on a set schedule



to ensure equipment is continuing to operate as intended within the design and to meet the current facility requirements. Additionally, when a space's use type is changed (ex. office space converts to conference floor), this process should be followed to ensure that the needs of the new space type are still being met and that no unnecessary energy is being wasted.

2. For consideration during an energy assessment
  - a. Lighting power density of 0.7 or lower
  - b. Efficient lighting controls – occupancy/vacancy sensors and daylighting controls
  - c. Equipment run times match with space needs
  - d. Non-LED lighting
  - e. Equipment nearing end of useful life
  - f. Equipment no longer serving the space's needs

#### Facility Equipment Standards

Mechanical and standard office equipment is a significant portion of Bloomberg's energy consumption. Making informed and pointed decisions about the purchase and replacement of this equipment is an important piece of the energy management puzzle.

#### ***Equipment Selection***

1. New equipment selection should always include an energy efficiency component
  - a. The highest efficiency option should always be considered
  - b. Wherever applicable, ENERGY STAR rated products and/or EPEAT Silver or greater should be selected. Refer to [Sustainable and Responsible Procurement](#) for more information.
  - c. LED lighting should be the standard, whenever possible

#### ***Meter Requirements***

1. All facilities should be separately metered, either through a direct utility meter or a sub-meter, where applicable
2. When building new sites, standard should include, at minimum, floor by floor metering, with HVAC, lighting, and plug loads separated on different meters whenever possible and accessible within the Building Management System (BMS)
3. Inventory and identify key specialized loads as noted above for performance tracking
4. When negotiating leases for new sites, sub-metering should always be requested within the negotiations

## Resources & References

- [Bloomberg 2020 Progress](#)
- **Commissioning**

A systematic process for investigating, analyzing, and optimizing the performance of building systems, aimed at ensuring that systems function as intended for the spaces they serve.

  - [Existing Building Commissioning Best Practices](#)
  - [New Construction Commissioning Best Practices](#)
- [ENERGY STAR Rated Equipment](#)

The EPA's ENERGY STAR program has built and continues to refine a set of standards to designate energy efficient equipment. This set of standards is continually updated to keep up with improving technology and increasing efficiency and includes many categories of products, such as appliances, electronics, office equipment, heating and cooling equipment, lighting, and others.
- [Energy Treasure Hunt](#)

From EPA's ENERGY STAR program, an effective way to identify energy savings opportunities, while simultaneously engaging participants in the process. This step-by-step process has successfully worked for organizations across the world.
- [EPEAT Equipment Registry](#)

EPEAT is a trusted source of environmental ratings of products. This global system addresses the full product lifecycle from a total environmental perspective – including energy efficiency.
- [Guidelines for Energy Audits](#)

Energy audits can be conducted with a variety of detail and rigor, depending on needs. Broadly, energy audits are broken down into three levels:

  - Level I – Site Assessment or Walk-through Audit
  - Level II – Energy Survey or Engineering Analysis
  - Level III – Detailed Analysis of Specific Capital Measures
- **Lighting Power Density (LPD)**

A lighting power requirement defined by the American National Standards Institute (ANSI), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), and the Illuminating Engineering Society of North America (IESNA) Lighting Subcommittee. The LPD equates to the load of lighting equipment in an area, calculated as watts per square foot.

  - $LPD = \text{Total \# of Watts of Lighting} / \text{Total Square Footage (of the defined area)}$

## FACILITY WATER MANAGEMENT

**Context** Bloomberg is committed to conserving water and implementing efficient practices to reduce water use where viable at office facilities. Water conservation is critical in protecting water resources, minimizing pollution, enhancing supply, maintaining the ecosystem and saving energy. These guidelines apply to existing areas of operation and departments, as well as potential acquisitions.

- Goals**
- ✓ Comply with Energy Policy Act 1992 (EPA 1992) requirements in all offices over 50 employees
  - ✓ Establish minimum water performance guidelines for water fixture upgrades and renovations
  - ✓ Develop guidelines for potable water consumption related to all Bloomberg-owned cooling towers

**Responsibility and Boundaries** Facilities, Capital Projects team, and Site Managers are responsible for reviewing and implementing the Facility Water Management Guidelines as applicable to individual regions.

**Ongoing Tracking Metrics** The following metrics shall be tracked and reported on annually to ensure compliance with the Facility Water Management Guidelines

- Water usage per facility
- Cooling tower water usage for all sub-metered cooling towers

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### Office Buildout Water Efficiency Strategies

1. In line with the [Sustainable Design and Construction Guidelines](#), office buildouts to be used by more than 50 employees are required to pursue a Sustainable Building Certification (LEED v4 Gold Level certification or higher). As a prerequisite of these programs, restroom and pantry fixtures included in the scope of work must meet minimum performance criteria. To meet and/or exceed these criteria, in corporate offices where Bloomberg has control of water fixture selection, select water efficient fixtures that have flow rates equal to or below the following:
  - a. Water Closets: 1.28 gpf
  - b. Urinals: 0.125 gpf
  - c. Restroom Faucets: 0.5 gpm with automatic sensors and timers set to 12-seconds or less
  - d. Pantry Faucets: 1.0 gpm
  - e. Showerheads: 1.5 gpm
2. Purchase only WaterSense® labeled fixtures in regions where available which meet the US EPA's water usage guidelines.

### Cooling Tower Water Management Strategies

1. Cooling towers use potable water as a byproduct of the HVAC process. In data centers or other facilities where Bloomberg has control of cooling towers, water efficiency measures should be investigated:

- a. Maximize the number of cycles that potable makeup water is used prior to being bled off (without impacting the functionality of the equipment). A minimum of 10 cycles of makeup water without exceeding any of the chemical parameters listed below will ensure that the system remains water efficient while the system maintains regular use.
    - i. Ca (as CaCO<sub>3</sub>): 1000 ppm
    - ii. Total alkalinity: 1000 ppm
    - iii. SiO<sub>2</sub>: 100 ppm
    - iv. Cl<sup>-</sup>: 250 ppm
    - v. Conductivity: 2000 µS/cm
  - b. If local regulations allow, investigate using non-potable water as a source for the makeup water in the cooling tower. In many cases, this can be provided by using filtered rainwater or filtered grey water.
2. To avoid leaks and ensure that systems are using the appropriate amount of water, cooling tower makeup water and/or downstream water should be sub-metered and logged. This data will help identify anomalies.

#### Ongoing Tracking and Evaluation

1. An assessment to account for the potential water supply, water disposal cost savings and maintenance cost savings will be performed as part of any future indoor plumbing renovations versus EPAct 1992 compliant fixtures and the above referenced Bloomberg's standard.
2. Report water meter readings on ENERGY STAR Portfolio Manager to keep track of annual water use reduction.
3. Install submeters on cooling towers and track cooling tower water consumption.

#### Resources & References

- [Bloomberg Water Risk Evaluation Tool](#)
- **EPAct** Energy Policy Act of 1992
- **GPM** Gallons per minute
- **GPF** Gallons per flush
- **US EPA Watersense Products**  
Reference for WaterSense Labeled Products for Specifying Compliant Fixtures

## FACILITY WASTE MANAGEMENT

**Context** A key component of Bloomberg's commitment to mitigating its environmental footprint is the reduction of waste. We have done and continue to do this through the implementation of comprehensive Waste Management Guidelines. These guidelines detail our efforts to reuse products with remaining useful-life to reduce waste and costs associated with purchasing new products, properly recycle to reduce natural resource consumption, and implement effective composting or other methods of disposing organic waste where available. These strategies are crucial to helping us minimize the impact of the waste we generate as a company.

Waste is only 1% of Bloomberg's annual emissions but reducing this impact by eliminating waste or diverting it from landfill is an area where all employees and visitors can contribute to our efforts. In countries where landfills are no longer used, waste is typically sent to incinerators, while these facilities produce energy, there is pollution associated with burning this waste. Maintaining a comprehensive waste diversion program demonstrates that our sustainability efforts are robust, all-encompassing and credible.

- Goals**
- ✓ Divert 90% of waste to recycling, compost or anaerobic digestion by 2020
  - ✓ 75% reduction, on a per-headcount basis, of office paper consumed by 2020 v. 2007 level
  - ✓ 75% of post- or pre-consumer waste in office paper by 2020
  - ✓ 100% of outbound warehouse packing sourced from either renewable or recycled materials by 2020
  - ✓ Educate staff on proper recycling and composting procedures

**Responsibility** It is the responsibility of Site Managers and Facility Management to be aware of the best practices and guidelines outlined in this plan and implement where possible.

- Ongoing Tracking Metrics** The following metrics shall be tracked and reported on quarterly to ensure compliance with the Sustainable Waste Management Guidelines
- Weight of non-diverted waste per facility
  - Weight of diverted waste per facility. Diverted waste must be reported per waste type (where possible):
    - Paper
    - Cardboard
    - Plastic
    - Metal
    - Glass
    - Batteries
    - Toner Cartridges
    - Compost or Anaerobic digestion
-

- Electronics/Appliances (E-Waste)
  - Lamps
  - Office Furniture
- 

#### General Approach/Guidelines

1. Comply with all local waste and recycling regulations
2. Provide separate and clearly labeled bins for paper recycling and general trash at convenient locations. Provide plastics/metals/glass recycling bins in pantries to dispose of one-time use plastic dishware, cups, and utensils.
3. Collect monthly waste and recycling data from waste haulers and report to the Sustainability team on a quarterly basis.
4. Reuse discarded items that still have a useful life, such as ongoing consumables and durable goods.
5. Offices are to use the waste and recycling educational signage templates from the Bloomberg signage package.
6. Investigate and report on new waste diversion programs in region on a semi-annual basis.
7. In Bloomberg offices where property managers handle waste contracts, engage with them to ensure they are aggressively pursuing diversion options and submitting quality data.
8. While cost saving opportunities are important, they should not have a material effect on our waste to diversion rate.

#### Ongoing Consumables

1. For ongoing consumables, offices will aim to reuse/recycle or compost/anaerobic digestion at least 50% by weight of total ongoing consumables waste
2. Offices will divert 100% of discarded batteries and toner cartridges from entering landfills

#### Durable Goods

1. Offices will reuse/recycle 100% of electronics and appliances
2. Offices will recycle/properly dispose of 100% of lamps
3. Offices will reuse/recycle 70% by weight of the furniture waste

#### Food Waste and Composting

1. If composting or other method for diverting organic waste, such as anaerobic digestion is provided by waste hauler and/or required by local rules and regulations, and feasible to implement, offices will create collection locations in appropriate areas to place food scraps, organic waste, and compostable products.
2. Confirm with waste hauler that the compost service can receive products with the ASTM D6400

standard. If not, ensure that products with the ASTM D6400 standard are being placed into the general trash bins.

#### Facility Alterations & Additions

Please refer to the [Sustainable Design and Construction Guidelines](#) for waste generated from facility alterations and additions.

#### Waste Audits

1. Conduct a waste audit annually. The findings of a waste audit may identify key improvement opportunities to increase diversion rates, reduce contamination rates, and reduce waste generated at the source.
2. Based on waste audit findings, reevaluate the existing waste and recycling program of the office and implement changes to the program where necessary.
3. Waste audits can either be conducted internally, by the waste hauler, or by another third-party waste auditor.

#### Education

1. The local squads (where available), or Facilities and Sustainable Business and Finance teams, are to provide education sessions for employees to learn about the office's waste and recycling program and existing strategies. Consider conducting the education session annually.
2. Provide an overview of the office's waste and recycling program and existing strategies to all new-hires.
3. Notify employees annually of the Sustainable Waste Management Guidelines and provide updates to employees whenever the guidelines are revised.
4. Train the cleaning staff regarding the waste policies and procedures in each office.
5. Assist Sustainability in developing employee communications and with best practices in waste bin signage.

#### Bins & Signage

1. Wherever there is a general trash bin, there should be a paper recycling bin, a plastics/metals/glass recycling bin, and where applicable, a compost/organics bin.
2. Educational signage and bins should be color coordinated for each waste stream in the office. Offices should follow the colors used by the local municipal waste authority/regulator.
3. Educational signage should be placed near all bins.
4. Each bin should have an identified schedule for custodial staff to check the bin, empty it, and document

the activity and any notes. If bins are frequently overflowing when custodial staff check it, then either a larger bin may be needed or the frequency in which custodial staff check the bin may need to increase. If bins are frequently not full when custodial staff check it, then a smaller bin may be needed, or the bin may not be necessary, or the frequency in which custodial staff check the bin may need to decrease.

### Best Practices

The following is suggested best practices for a sustainable waste management program.

#### Pantries

1. If an office has a pantry, access to an area to wash dishes, and less than 50 employees, then reusable dishware, cups, and utensils should be provided in the pantry area in lieu of one-time use plastic dishware, cups, and utensils.
2. If an office has a pantry, access to an area to wash dishes, and more than 50 employees, then reusable dishware, cups, and utensils should be provided in the pantry area, in addition to one-time use plastic dishware, cups, and utensils or one-time use ASTM D6400 compostable dishware, cups, and utensils.
3. If pantries are staffed by a third-party vendor, work with the vendor to ensure that the guidelines and best practices identified in the Waste Management Guidelines are known and implemented.

#### Resources & References

- **ASTM D6400**  
The standard to test for if a product was designed to be composted in municipal and industrial aerobic composting facilities.
- [City of London's Waste and Recycling](#)  
London's primary source for commercial waste and recycling regulations.
- **Contamination**  
When any item is placed in the incorrect waste stream (ex: if you collect material x for recycling, anything other than material x is a contaminant).
- [DC Department of Public Works](#)  
Washington, D.C.'s primary source for commercial waste and recycling regulations.
- **Diversion Rate**  
The percentage of waste materials diverted from traditional disposal such as a landfill, and is recycled, composted or reused.
- **Durable Goods**  
Good with a useful life of 2 years or more and are replaced infrequently or may require capital program outlays. Examples include furniture, office equipment, lamps, appliances, external power adapters, televisions, and audiovisual equipment.



- **Facility Alterations & Additions**

Typically refer to wall studs, insulation, doors, windows, panels, drywall, trim, ceiling panels, carpet, flooring material, adhesives, sealants, paints, and coatings. Mechanical, electrical, plumbing, furniture, fixtures, and specialty equipment such as elevators are excluded.

- [LA Sanitation](#)

Los Angeles' primary source for commercial waste and recycling regulations

- [NYC Department of Sanitation](#)

New York City's primary source for commercial waste and recycling regulations

- **Ongoing Consumables**

Consumables that have a low cost per unit and are regularly used and replaced during business. Examples include paper, cardboard, binders, desk accessories, glass, plastic bottles, aluminum cans, food waste, and general trash.

- [San Francisco Environment](#)

The city of San Francisco's primary source for commercial waste, recycling, and composting regulations.

- **Waste Audit**

An audit of waste that was collected in a 24-hour period, typically without the knowledge of the waste generators, to identify a sample of the typical waste and recycling program's effectiveness. Waste audits produce the rate of waste materials that were diverted from landfills or incinerators and were recycling, reused, or composted; the contamination rate of the waste streams; and a waste characterization identifying typical items found in the waste stream.

## INDOOR AIR QUALITY

**Context** Clean air is a critical component to our health and can be degraded by outdoor pollutants and off-gassing from building materials, surfaces, indoor combustion sources and water leaks. Poor ventilation practices can fail to address these sources and result in exposure to volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and microbial pathogens. Degraded air quality can diminish work productivity and cause sick building syndrome (SBS) with acute health effects. Bloomberg is committed to preventing or minimizing the exposure of occupants to harmful and toxic environment.

- Goals**
- ✓ Prohibit smoking in and near all Bloomberg office locations and comply with all local and national regulations regarding Environmental Tobacco Smoke (ETS).
  - ✓ Implement Indoor Integrated Pest Management (IPM) practices at all facilities where possible.
  - ✓ Implement green cleaning program to reduce exposure to toxic chemicals where possible.
  - ✓ Conduct routine indoor air quality testing, where possible

**Responsibility** It is the responsibility of Facility Site Manager (FSM), custodial teams, pest management vendors and on-site staff to be aware of the best practices and guidelines outlined in this plan and monitor vendors' compliance where appropriate.

- Ongoing Tracking Metrics** The following metrics shall be tracked and reported on annually to ensure compliance with the Indoor Air Quality Guidelines
- Percentage of cleaning products in compliance with green cleaning guidelines
  - Percentage of pest management practices and products in compliance with IPM guidelines
  - Air quality test results

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### Environmental Tobacco Smoke (ETS)

1. The following protocols will be enforced to minimize the effect of ETS to building occupants:
  - a. Smoking is prohibited in the building
  - b. On-property smoking is prohibited within 25 feet of entries, outdoor air intakes and operable windows

### Integrated Pest Management (IPM)

1. All areas of the Bloomberg office space will utilize IPM techniques where possible. In tenant spaces

where IPM is provided by base building vendor, policy should be shared with building management.

2. The vendor will employ the following techniques in managed facilities:
  - a. **Monitoring:** The pest management vendor should implement a tracking tool to monitor each pest. The monitoring method and schedule, and the person in charge of monitoring, should be tracked.
  - b. **Environmental Controls:** Facilities management and the vendor will ensure the intentional manipulation of the environment to reduce pest's accessibility to food, water and shelter.
  - c. **Mechanical Controls**
    - i. Direct mechanical controls should be directed at destroying a pest and/or its habitat with traps – rat, mouse, insects, etc.
    - ii. Remove of nests and/or webs
    - iii. Seal cracks or crevices where insects and/or rodents may enter
  - d. **Organic Controls:** Defer to pest management chemicals that are derived from organic compounds, such as tree bark or flowers, and comes in the forms of oils or dusts, which can be highly effective in pest control.
  - e. **Least Toxic Products:** Least toxic pesticide applies to a pesticide product that, other than rodent bait, is applied in a self-contained, enclosed bait station placed in an inaccessible location, or applied in a gel that is neither visible nor accessible.
    - i. Contains active ingredients and known inert ingredients that meet the least toxic Tier 3 hazard ingredient under the City and County of San Francisco's hazard screening protocol
  - f. **Chemical Controls:** Defer to pesticides that are used to kill infesting pests as the last resort for pest control in managed facilities.
3. Refer to [Appendix B](#) for full IPM Guidelines which can be shared with pest management vendor or building management.

### Green Cleaning Program

1. Cleaning products have agents that have the potential to harm human health and damage interior finishes, and can build up and negatively impact the indoor air quality. The implementation of a green cleaning program is imperative to reduce levels of chemical, biological and particulate contaminants which can compromise human health, building operations, and the environment. The green cleaning program will reduce the health and environmental effects of cleaning products and disposable paper products, and contribute to LEED or other green building certifications.
2. **Green Cleaning Procedure**

Coordinate with cleaning vendor to assess all current cleaning products and equipment. It is the responsibility of the Bloomberg site manager to ensure contractor compliance with the [Green Cleaning Guidelines](#).

  - a. Provide sustainable cleaning products and equipment guidelines to cleaning vendor that

align with the Green Cleaning Guidelines.

- b. Provide training for proper use of green cleaning materials and products.
  - c. Request regular tracking of cleaning purchases and equipment to ensure they meet sustainability criteria.
  - d. Consider conducting a custodial effectiveness audit in accordance with APPA Leadership in Educational Facilities Custodial Staffing Guidelines, or local equivalent to ensure the building is operating in accordance with the Green Cleaning Program and assess the overall cleanliness.
3. Sustainable Cleaning Product Purchasing Guidelines

To simplify green cleaning product purchasing, only purchase products that meet green cleaning standards listed below.

#### **Green Cleaning Standards Overview**

- **Green Seal**

Green Seal provides science-based environmental certification standards that are credible, transparent and essential to helping manufacturers, purchasers and consumers make responsible choices that positively impact business behavior and improve quality of life.

- **UL Ecologo**

Certification is based on multi-attribute, lifecycle-based standard that assesses a products environmental performance.

- **Design for Environment (DfE)**

Labelling program that identifies cleaning products demonstrated to be less damaging to human health and the environment, and applies to all purpose cleaners, dish soaps, hand soaps, odor removers, degreasers, metal cleaners and polishes, and bathroom cleaners.

- **Forest Stewardship Council (FSC)**

Labelling program that identifies wood products grown and harvested with responsible forest management practices.

- **European Union (EU) Ecolabel**

EU Ecolabel has over 40,000 products and services verified by independent experts with strict criteria that assesses the product lifecycle from production to recycling or disposal, and health and responsible production.

#### Air Quality Testing and Monitoring

To ensure the best indoor air quality is maintained over time, Workplace Operations should partner with a third-party vendor to conduct annual indoor air quality testing. Air quality tests should be conducted in offices with 50 or more employees or in areas that have poor outdoor air quality. Air quality testing should occur during regularly occupied hours and with HVAC equipment running under regular conditions, and with

airside economizers disabled wherever possible. A baseline reading should be taken on the roof of the building when possible, or another location where outdoor air levels can be tested. On each occupied floor, a minimum of one location should be sampled for every 25,000 square feet. Readings should be taken in each sample location a minimum of 3 times during the day, with each reading being separated by at least 30 minutes for a single sample location. Measurements should be taken within a standard breathing zone and at a height between 3 feet and 6 feet above the floor. Vendor should provide make and model of testing equipment and last calibration date with results report.

Where possible, test for the following common air quality contaminants and pursue below thresholds (per WELL Building Standard and ASHRAE 62.1):

- CO<sub>2</sub>: no greater than 700ppm above the initial outdoor baseline reading (i.e. if the outdoor reading is 200ppm of CO<sub>2</sub>, the indoor reading should be 900ppm or less)
- Formaldehyde: less than 9ppm
- VOCs: less than 500 µg/m<sup>3</sup>
- Carbon monoxide: less than 9 ppm
- PM<sub>2.5</sub>: less than 15 µg/m<sup>3</sup>
- PM<sub>10</sub>: less than 50 µg/m<sup>3</sup>
- Ozone: less than 51 ppb
- Radon: less than 0.148 Bq/L [4 pCi/L] in the lowest occupied level of the building

#### Resources & References

- [Official San Francisco Pesticide Hazard Screening List](#)
- [I-BEAM Baseline Indoor Air Quality Building Audit Form](#)
- [EPA Green Cleaning Standards and Product Recommendations](#)
- [Green Seal](#)
- [EPA Design for Environment \(Dfe\)](#)
- [Forest Stewardship Council \(FSC\)](#)
- [EU Ecolabel Product Catalogue](#)
- [WELL Air Quality Standards](#)

## SUSTAINABLE AND RESPONSIBLE PROCUREMENT

### I. Context:

Sustainability runs through everything we do at Bloomberg. It is at the core of decisions we make and is viewed as a key business driver for our products and services, internal operations and community engagement. We take a holistic view of sustainability and our sustainability initiatives integrate environmental, social, and governance factors into how we manage our internal operations and develop our products.

Bloomberg recognizes that the products and services it purchases have inherent environmental, social, governance impacts in the communities in which it conducts business. As such, we are committed to working with vendors who operate in a responsible and sustainable manner and will help us maintain and promote our high standards regarding environmental protections, human rights and ethical business practices.

### II. Goals:

Our commitment to sustainable and responsible procurement will be implemented through programs and initiatives developed and managed by Supply Chain. Specifically, Supply Chain is currently working with Sustainability, Legal and end-users to develop and implement a Sustainable and Responsible Procurement Program that will:

- Enable better informed purchasing decisions at a vendor and product or service level that align with Bloomberg's corporate sustainability strategy and goals
- Identify vendors and products/services that have significant inherent sustainability risks for comprehensive sustainability risk assessment
- Track our implementation progress, including developing and utilizing metrics for measurement, and allow for continuous improvement of our practices
- Fulfill our reporting commitments as stated in our Impact Report, GRI Index, and other reporting frameworks

Key to this process is the Bloomberg Supplier Code of Conduct (i.e., the "Code"), which defines our minimum requirements with respect to the environmental, social and governance performance of our Suppliers. Suppliers who agree to comply with this Code are responsible to ensure their sub-contractors, business partners and suppliers (the "Supply Chain") act in a manner consistent with this Code, and that their Supply Chains are in full compliance with the Code and all applicable local, city, state, federal and international laws, rules and regulations. Suppliers also acknowledge that compliance with the Code is subject to the audit provisions set forth in the Master Services Agreement.

Currently, the Code is distributed to all potential suppliers in our RFX processes and is also included as a term and condition in our standard Master Services Agreement. Going forward we will be working towards more comprehensive dissemination of our Code to Bloomberg's critical vendors.

### **III. Responsibility:**

These guidelines apply to all Bloomberg LP employees who purchase goods or services on behalf of Bloomberg and suppliers who provide services/products to Bloomberg, either directly or through subordinates. Specific requirements are further described within the Sustainability and Responsible Procurement Program Initiatives stated below.

### **IV. Sustainable and Responsible Procurement Program**

There are two components to Bloomberg's overall Sustainable and Responsible Procurement: Effective vendor management and environmentally preferred purchasing. While portions of both of these initiatives are currently in practice, we are in the process of enhancing and formalizing these efforts to develop a more robust and structured program in both areas.

#### **1. Vendor Sustainability Assessment Initiative (Sourcing & Selection and On-Going Monitoring)**

- **Purpose:** Supply Chain is formalizing its environmental, social and governance criteria for key vendors through the development of a Vendor Sustainability Assessment that will ensure that those vendors' policies and practices align with the requirements of Bloomberg's Supplier Code of Conduct. Part of this development is a process by which we will identify which vendors will be subject to these criteria, based on products/services offered and/or vendor risk profile.
- **Applicability:** The Vendor Sustainability Assessment Initiative applies to the Sourcing & Selection of certain new vendors and the On-Going Monitoring of certain existing vendors with which Procurement works directly on behalf of business and operating departments. The initiative does not include the vendors with which these departments work directly without the assistance of Procurement.
- **Goals:** In 2019, develop and implement a methodology for assessing those vendors that pose a significant risk to our sustainability goals and efforts, and ensure compliance with our Supplier Code of Conduct, including metrics to assess our progress.

#### **2. Environmentally Preferred Purchasing Initiative ("EPP Initiative")**

- **Purpose:** The purpose of the EPP Initiative is to encourage purchasing decisions that balance traditional purchasing criteria of performance, price, availability and end-user requirements with environmental considerations for the specific product categories listed below.
- **Applicability:** The EPP Initiative applies to all Sourcing and Purchasing (Procurement) professionals who assist business and operating departments in purchasing the products identified in the EPP Guidelines and the departments that purchase these products directly without the assistance of Procurement.

We ask suppliers to represent, warrant and covenant to Bloomberg and its affiliates that to the extent applicable and practicable, without adversely affecting the quality or results of the Services and Deliverables, it shall seek to use products certified under a widely recognized environmental responsibility and sustainability certification process, subject to Bloomberg's discretion, for all goods or products used to provide the Services and Deliverables.

- Product categories applicable to EPP Guidelines:
  - **Ongoing Consumables:** materials with a low cost per unit that are regularly used and replaced through building operations.
  - **Durable Goods:** Goods that have a useful life of 2 years or more and are replaced infrequently or may require capital program outlays to purchase.
  - **Electronics Manufacturing (BLP Core Branded-Products):** Electronic products that we design, produce and distribute that incorporate environmentally responsible materials and practices.
  - **Graphic Design Products:** Includes an assessment of the environmental impacts of the full life cycle of graphic design products (packaging, printed materials, publications, etc.). The assessment should consider raw material selection, transformation, manufacturing, transportation, use, and disposal.
  - **Promotional Items (aka "Premiums"):** Branded merchandise with a Bloomberg logo given away to clients and potential clients to promote the company and our products.

See [Appendix D](#) for specifics and details related to EPP guidelines for these product categories.

- Goals: Beginning in 2019, Supply Chain will collaborate with Procurement and others to implement the EPP guidelines into defined businesses within Bloomberg.



## GREEN EVENTS

**Context** Sustainable event planning considers the environmental impacts of all types of events (such as internal receptions, hotel trainings, exhibitions, etc.) from their inception to execution. This includes the choice of venue, travel options, food preparation and consumption, printing of marketing material, vendor relations, and shipments of Bloomberg materials to and from the event. When planning Bloomberg office or non-office events the planning process should include: choosing ecologically responsible venues and vendors, reducing the amount of salespeople travelling for any given event, and reducing the amount of materials printed and shipped. One of the best guidelines for us to follow in Corporate Events is “Reduce, Reuse, and Recycle.”

- Goals**
- ✓ Use vendors and venues that specifically promote their sustainability strategies
  - ✓ Use 25% of food that is seasonal and locally sourced (within 100 miles)

**Responsibility** Green Events Guidelines apply to both Bloomberg office or non-office events. It is the responsibility of the Events Team to be aware of the best practices and guidelines outlined in this plan and implement where possible.

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### Events

The following will serve as a guide to ensure all Bloomberg events, whether hosted in a Bloomberg office or outside of the office, are executed in the most sustainable way. There will be times when the Events Team may not be able to go with the eco-friendly alternative, however all sustainable options must be examined before a non-sustainable option is chosen.

#### 1. Examples of Sustainable Event Planning Practices

- a. Choose venues and vendors that employ sustainable practices
- b. Minimize travel time to and from the venue during planning stages
- c. Reduce the amount of materials printed and shipped, use digital vs. printed materials when possible
- d. Reuse materials when possible
- e. The best guideline to follow is “Reduce, Reuse, and Recycle.”

#### 2. Sustainability Criteria

- a. Venue
  - i. Choose venues with sustainable practices already in place, with preference given to venues with LEED, BREEAM or other sustainable certifications whenever possible
  - ii. Pick locations for the venues that would require the least amount of travel for all attendees and/or with easy access to public transport

- b. Vendors
  - i. When sending out Requests for Proposals (RFPs) to vendors, request that the submitted proposals contain language addressing how the vendor plans to incorporate sustainability practices into the event and minimize impact on local environment
- c. Food
  - i. Source local (grown within 100 miles), seasonal, sustainably and/or organically grown food
  - ii. Consider following the nutrition guidelines in the [Healthy Workplace Guidelines](#) when creating the menu
  - iii. Consider using domestic wines and alcohol for the bar, along with seasonal fruits and locally sourced mixers for the specialty drinks
- d. Waste Reduction
  - i. Use temporary signage with lighting or LCD screens
  - ii. Choose reusable cutlery, dishware, décor and furniture items whenever possible, check with Corporate Events team for the available inventory
  - iii. If must use disposable products, use compostable options that comply with ASTM 6400, if the venue has composting program, otherwise use recycled/recyclable wares
  - iv. Check which waste disposal programs the venue has in place (eg. recycling, composting etc.) before selecting the disposable products for the event
  - v. Ensure the caterer establishes contacts with local organizations that will take leftover food to foodbanks or homeless shelters
- e. Audio/Visual
  - i. Request ENERGY STAR or Energy Smart electronics for your event, if those options are not available, request newer equipment which is usually more energy efficient

## SUSTAINABLE DESIGN AND CONSTRUCTION

**Context** Bloomberg acknowledges the environmental impacts of the design and construction of new office developments and will use applicable guidance and tools available to mitigate our environmental footprint through implementing an effective Sustainable Design and Construction Guidelines.

- Goals**
- ✓ Standardize the sustainability efforts and strategies of renovation, design, and construction activities where possible
  - ✓ Pursue green certifications (LEED, BREEAM, etc.) at offices designed for 50 or more employees, with LEED Gold or equivalent considered to be standard
  - ✓ Focus material selection to prefer local vendors and maximize sustainability attributes
  - ✓ Prevent indoor air quality (IAQ) problems resulting from any construction or renovation projects, thus helping to sustain the comfort and well-being of construction workers and building occupants.

**Responsibility** It is the responsibility of project design and construction teams to be aware of these guidelines and implement where possible.

**Ongoing Tracking Metrics** The following metrics shall be tracked and reported annually to ensure compliance with the Sustainable Design and Construction Guidelines:

- Number of facilities built to Guideline Standards
- LEED or equivalent Checklist for each facility (whether or not officially certified)

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### Minimum Requirements

The following are the minimum requirements for all Bloomberg offices worldwide:

#### General

1. Bloomberg's Sustainable Design and Construction Guidelines apply to changes that affect the usable space in the building. Mechanical, electrical or plumbing system upgrades that involve no disruption of usable space do not require compliance with the guidelines and should follow local codes and regulations.
2. This document establishes guidelines for developing a construction IAQ plan, construction waste management plan, erosion and sedimentation control plan and sustainable purchasing practices for construction materials, as well as best practices that are encouraged for Bloomberg office buildouts, when applicable.

#### Construction Indoor Air Quality (IAQ) Management Plan

1. At least fourteen (14) days prior to any construction activity, the contractor shall develop and submit to

Bloomberg for review a construction IAQ plan. A template for this plan can be found in [Appendix F](#). The primary focuses of this plan are:

- a. HVAC Protection
  - b. Source Control
  - c. Construction Materials
  - d. Housekeeping
  - e. Pathway Interruption
  - f. Scheduling
2. Contractor shall retain a description of how the plan was executed, including:
- a. List of IAQ protective measures to be instituted on the site
  - b. Schedule for inspection and maintenance of IAQ measures
  - c. Photographs demonstrating how the measures were implemented
  - d. Replace all filtration media immediately prior to occupancy
  - e. Information on air flush out (if performed)

#### Construction Waste Management

1. At least fourteen (14) days prior to any construction activity, the contractor shall develop and submit to Bloomberg for review a Waste Management Plan to ensure that existing site and building materials are reused, salvaged, or recycled and that waste disposal in landfills shall be minimized. A template for this plan can be found in [Appendix G](#).
2. If any waste materials encountered during the deconstruction/demolition or construction phase are found to contain lead, asbestos, PCBs, fluorescent lamps, or any hazardous substances, they are to be handled and removed in accordance with local, state, and federal laws and requirements concerning hazardous waste. These materials and any other hazardous materials must be excluded from the construction waste stream calculations.
3. Contractor shall retain a description and report to Bloomberg of how the plan was executed, including:
  - a. Total weight of all waste generated as part of the scope of work
  - b. Weight of each waste stream as a subset of the total (wood, plastic, recycled masonry, landfilled waste, etc.)
4. As applicable, a target of 75% will be recycled and/or salvaged.

#### Sustainable Material Selection

1. Bloomberg acknowledges the value of purchasing sustainable products and requires that vendors provide sustainable products when appropriate and/or possible. Vendors shall provide information on recycled content, rapidly renewable, FSC Certified, low VOC adhesives, sealants, and paints, FloorScore certified flooring, and products with no added urea formaldehyde that meet the below specifications in addition to providing reduced packaging options.

2. The contractor personnel responsible for construction material purchasing will report the sustainable material purchases to the appropriate Bloomberg personnel.
3. At least 25% of the total renovation material purchases (product cost only, excluding labor) have one of the following features:
  - a. Extended Producer Responsibility
  - b. Bio-Based Materials
  - c. FSC Wood Products
  - d. Reused Materials
  - e. Recycled Content
4. Strong preference given to products that have Environmental Product Declarations and/or Health Product Declarations or equivalent.
5. Adhesives, sealants, paints, coatings, carpet, carpet cushion, flooring products, and composite wood products comply with the applicable low-VOC guidelines, and any exception to this must be documented.
  - a. Sustainable Material Selection Specifications can be found in [Appendix H](#).

#### Lighting Power Density

1. At a minimum, design existing or future spaces to meet or exceed ASHRAE 90.1-2013 lighting power density allowances. Aim for at least at 25% reduction below the ASHRAE standard.
  - a. Office: 1.10 watt/square foot
  - b. Conference Room: 1.30 watt/square foot
  - c. Lounge/ Breakroom: 1.20 watt/square foot
  - d. Restrooms: 0.90 watt/square foot
  - e. Corridor: 0.50 watt/ square foot
  - f. Lobby: 1.30 watt/ square foot
  - g. Copy/ Print Room: 0.90 watt/ square foot
  - h. For further space types, please refer to the [ASHRAE 90.1-2013 Standard](#).

#### Best Practices

The following are suggested best practices for sustainable design and construction.

1. Pursuit of Sustainable Building Certifications
  - a. If an office is to hold more than 50 employees and remain in operation for several years, LEED Gold certification or the international equivalent is required.
  - b. Please refer to [Appendix I](#) for a sample checklist with recommended credits to pursue based on previous Bloomberg sustainable building certifications.
2. Incorporation of Well-Being Design Features
  - a. The following design strategies should be executed when available:

- Active Design  
Where possible, add design features that promote an active interaction with the space. An example of this would be interior stairwells that promote employees to move between adjacent floors in an active way, instead of taking the elevator.
- Height adjustable workstations  
Providing workstations that allow for employees to sit or stand throughout the day offers health benefits such as reducing back discomfort, cancer risk, and increasing life expectancy.
- Mothers' Rooms  
Provide a Mothers' Room that offers a sink, a refrigerator, and a chair for new mothers in compliance with the Bloomberg policy.

#### Resources & References

- [ASHRAE 90.1-2013 Standard](#)
- **Bio-Based Material**  
Material must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Excludes hide products, such as leather and other animal skin material. Products meeting bio-based materials criteria are valued at 100% of their cost for the purposes of credit achievement calculation.
- [BREEAM \(Building Research Establishment Environmental Assessment Method\)](#)
- **Environmental Product Declaration**  
A statement that the item meets the environmental requirements of ISO 14021-1999, ISO 14025-2006 and EN 15804, or ISO 21930-2007
- **Extended Producer Responsibility**  
Measures undertaken by the maker of a product to accept its own and sometimes other manufacturers' products as postconsumer waste at the end of the products' useful life and recycle them into new products. A program must be widely available. For carpet, extended producer responsibility must be consistent with NSF/ANSI 140-2007
- **Health Product Declaration**  
A statement of each intentional ingredient and known residual of a material. Met by full disclosure of intentional ingredient requirements, Known Hazards requirements, or the role of the ingredient with explanation.
- **IAQ**  
Indoor Air Quality. See SMACNA guidelines for strategies to maintain good indoor air quality
- **LEED**  
Leadership in Energy & Environmental Design
- [LEED Credit Library](#)

- **VOC (Volatile Organic Compound)**  
Carbon compounds that participate in atmospheric photochemical reactions (excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, and ammonium carbonate). The compounds vaporize (become gas) at normal room temperatures.
- [WELL Building Standard](#)

## GREENHOUSE GAS (GHG) CALCULATION AND SUSTAINABILITY REPORTING GUIDELINES

**Context** As climate change presents a material risk to Bloomberg, threatening both the resiliency of the Company's global assets and the continuity of its supply chain, it is necessary for Bloomberg to calculate and monitor its resource consumption and greenhouse gas (GHG) emissions to measure the environmental impact of our organization and to help formulate strategies to mitigate this impact.

Bloomberg calculates resource consumption and GHG (i.e., CO<sub>2</sub>e) emissions for six defined categories of activity within the company: Energy Consumption, Business Travel, Magazine Publishing, Global Logistics, Office Paper Consumption and Landfill Waste Generation. Resources and emissions are also segmented by operation department to identify impact, and opportunity, by areas of responsibility. By measuring and managing resource and emissions-related issues, Bloomberg has been able to improve environmental performance, increase resource efficiency, reduce operational costs, identify and mitigate risk, and enable the company to prepare for the potential impacts of climate change. This process applies to existing areas of operation and departments, and is applied to acquisitions at the time of assimilation.

- Goals**
- ✓ Reduce emissions 20% by 2020 vs. 2007 baseline (MT of CO<sub>2</sub>e) per [2020 targets](#)
  - ✓ Calculate and track annual resource consumption and GHG emissions based on the standards set out by the latest version of the Bloomberg Carbon Emissions Calculation Process
  - ✓ Complete all mandatory and elective reporting requirements, including the annual [Bloomberg Impact Report](#) and others referenced below
  - ✓ Report on Governance, Strategy, Risk Management, and Metrics and Targets around climate-related risks through Task Force on Climate-related Financial Disclosures ([TCFD](#))

**Responsibility** Bloomberg utilizes an Operational Control boundary for the purposes of all resource and emissions-related calculations and reporting. The established Operational boundaries pertain to all facilities and operations that were active during a specified time period. This guideline is the responsibility of the Global Head of Sustainable Business Operations (SBO). That role tracks all requirements related to GHG management and communicates these requirements to relevant parties in operating departments across Bloomberg as needed for annual data collection and emissions calculations. Those operating departments include: Facilities, Travel, Publishing Operations, Global Logistics, Bloomberg Ink and Purchasing. SBO is responsible for maintaining an active list of parties within these departments



responsible for providing data required for annual GHG emissions calculations as well as the Carbon Emissions Calculation Process document.

**Ongoing Tracking Metrics** The following metrics shall be tracked and reported annually to ensure compliance with the Climate Change and GHG Calculation and Reporting Guidelines:

- Resource consumption and absolute emissions by Scope
  - Resource consumption and absolute emissions by Source
  - Emissions targets and progress towards targets
  - Emissions intensities
  - Risks to Bloomberg operations associated with climate change
- 

### GHG Emissions Management and Reporting

1. Data Collection and GHG Emissions Calculation: SBO maintains the Carbon Emissions Calculation Process document, which details the process by which all data is collected and emissions calculated for all activity within Bloomberg's boundaries.
  - a. SBO is responsible for coordinating/ executing all actions required in this process to complete data collection and emissions calculation exercises for each reporting year.
  - b. In addition to calculation of absolute CO<sub>2</sub>e emissions, SBO also calculates key efficiency metrics, progress vs. targets and annual CO<sub>2</sub>e and financial savings related to Bloomberg's environmental efforts.
2. Third Party Verification: SBO coordinates and facilitates third party verification for annual global GHG inventory (in conjunction with third party verification of the overall annual Impact Report).
  - a. Third party verification documentation for GHG emissions (and for Impact Report) is included as an appendix to the annual Impact Report.
3. Global Reporting: Bloomberg reports its GHG emissions as part of a large reporting portfolio, performed on an annual cycle.
  - a. Bloomberg publishes an annual Impact Report, which includes details of GHG emissions as well as other information about Bloomberg's environmental (and non-environmental: social, governance, product) initiatives. The annual Impact Report includes specific information required by the following reporting frameworks:
    - GRI Standards guidelines— in accordance with Comprehensive Option— and G4 Media Sector Supplement

- SASB Standards and its industry-specific accounting standards (Professional Services, Internet Media & Services and Media, Production & Distribution)
  - TCFD reporting guidelines, which includes Governance, Strategy, Risk Management and Metrics and Targets around climate-related risks.
- b. Bloomberg reports its GHG-related activity and emissions, as well as other qualitative and quantitative aspects of its Sustainability program, to additional frameworks on a compulsory and voluntary basis throughout the year:
- Principles for Responsible Investment (UN PRI): Bloomberg voluntarily completes UN PRI surveys as both a “Service Provider” and “Asset Owner”
  - UK CRC Energy Efficiency Scheme (UK CRC): Bloomberg completes this mandatory UK regulatory filing with assistance from NUS Consulting in the UK, quantifying Bloomberg’s energy consumption from UK operations
  - CDP Survey: Bloomberg completes the CDP Supply Chain Climate Change Survey at the request of multiple customers
  - NYC Carbon Challenge: Bloomberg participates in the NYC Carbon Challenge, a program for which we committed to reducing NYC-based energy consumption by 50% by 2023. Bloomberg provides annual updates against this target via a template provided by the NYC Carbon Challenge itself
  - RE100: Bloomberg is committed to RE100, which is a commitment for 100% of our energy consumption to be sourced from renewable sources by 2025. Bloomberg provides annual updates against this target via a template provided by RE100 itself
  - United Nations Global Compact (UN GC): Bloomberg completes its required UN GC Communication on Progress (CoP) by posting a copy of our downloadable Impact Report, providing a link to the Impact Report website and completing a short survey, all on the UN GC website.
  - One-Off Sustainability Survey Requests: Bloomberg is often asked to complete specific customers' sustainability surveys, for use and evaluation at those specific companies. SBO addresses these requests on a case-by-case basis

### Definitions

- a. Greenhouse Gas Emissions (GHG): Gases (carbon dioxide, methane, nitrous oxide, fluorinated gases) that trap heat in the atmosphere are called greenhouse gases. GHG Emissions are divided into three scopes:
- Scope 1 Emissions: All direct GHG emissions from building operations including fuel consumption and refrigerants
  - Scope 2 Emissions: All indirect GHG emissions from consumption of purchased electricity, heat, or steam

- o Scope 3 Emissions: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport related activities not owned or controlled, waste disposal, etc.
- b. Climate Change: Refers to any meaningful change in the measures of climate lasting for an extended period of time (Environmental Protection Agency)
- c. GHG Protocol: Provides guidance on GHG accounting principles, defining inventory boundaries, identifying GHG emissions sources, defining and adjusting an inventory base year, and tracking emissions overtime
- d. Climate Resilience: The ability to prepare for and adapt to changing conditions; to withstand, respond to, and recover rapidly from disruptions (U.S. Department of Housing and Urban Development (HUD))
- e. Climate Adaptation: Adjusting natural or human systems in a changing environment that reduces negative effects and takes advantage of opportunities (HUD)

#### Resources & References

- Bloomberg Carbon Emissions Calculation Process (Version 10.0)
- [Bloomberg Impact Report](#)
- [Greenhouse Gas \(GHG\) Protocol](#)
- [World Resources Institute](#)
- [World Business Council for Sustainable Development](#)
- [Global Reporting Initiative](#)
- [Sustainability Accounting Standards Board](#)
- [Task Force on Climate-related Financial Disclosures](#)
- [CDP](#)
- [FEMA Local Mitigation Planning Handbook, March 2013](#)

# Operating Guidelines Appendix

## **APPENDIX A: GREEN CLEANING POLICY**

The intent of this policy is to reduce the exposure of building occupants and maintenance personnel at Bloomberg sites to potentially hazardous chemical, biological, and particle contaminants which adversely impact air quality, health, building finishes, building systems, and the environment. All janitorial contracts will include the 'Green Cleaning Policy', as applicable. Any Bloomberg property that does not include the guidelines in janitorial contract, must document the reason for the exclusion.

### Goal

Bloomberg aims to have sustainable cleaning products and processes used at all facilities. It is the responsibility of FSMs to review vendors' compliance with this policy periodically.

### Best Practices

1. Control pollution and waste by reducing the amount of consumables
2. Limit indoor-polluting activities and ensure space is well-ventilated
3. Prioritize worker and occupant safety
4. Clean to maximize the extraction of pollutants (particles, gas, and biopollutants) from the building environment
5. Minimize chemical, particle, and moisture residues
6. Minimize human exposure to pollutants with safe handling and storage practices
7. Proper disposal of janitorial waste
8. Clean during times of day with low building occupancy to avoid chemical exposure to vulnerable building occupants
9. Use minimally invasive cleaning chemicals that will have little to no harm on the indoor air quality (e.g., contain low to no VOCs, no harsh odors)
10. Use cleaning equipment that has a dBA value less than 70 to reduce noise pollution inside the building
11. Every effort should be made to conserve water and energy during cleaning. Some examples include using cold water instead of hot water for cleaning and turning off lights after nighttime cleaning.
12. Seek alternative, certified green products in lieu of toxic chemicals whenever possible, and use the minimum amount of products containing toxic chemicals when necessary. Follow chemical dilution procedures to ensure the minimum amount of cleaning chemicals necessary is used.
13. When available, chemical concentrates dispensed from portion-controlled, closed dilution systems should be used as alternatives to open dilution systems or non-concentrated products. All opportunities to do this will be documented.

### Sustainable Cleaning Products

1. **The sustainable cleaning products** purchased for use in all Bloomberg sites will meet one or more of the following standards for the appropriate product category:
  - Green Seal
  - UL Ecologo
  - EPA Safer Choice Standard
  - EU Ecolabel
  - California Code of Regulations maximum allowable VOC levels for the specific product category
  - EPA Safer Choice Standard
2. **Disposable janitorial paper products** and trash bags shall meet the minimum requirements of one or more of the following programs for the applicable product category:
  - FSC Certification for fiber procurement
  - US EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners – requiring plastic trash bags have 10% - 100% postconsumer recycled content.
  - California integrated waste management requirements, for plastic trash can liners
  - Green Seal
  - UL Ecologo
  - Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers
3. **Hand soaps and hand sanitizers** shall meet one or more of the following standards:
  - No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations (e.g., food service and health care requirements)
  - Green Seal
  - UL Ecologo
  - EPA Safer Choice Standard

### Maintenance Personnel Staffing and Training

Sufficient cleaning of the building requires at least one hour of cleaning per day for each 5,000 square feet. In the event of staffing shortages, the building will supplement the cleaning staff with a backup vendor.

Key cleaning and maintenance personnel must be properly trained in the use, maintenance, and disposal of cleaning chemicals, dispensing equipment, and packaging. All cleaning staff, including back up personnel, are required to have at least 8 hours of training per year. Trainings are held quarterly and vary by topic area. Logs will be kept on file that will show the employee name, the name of the course, the date and duration of training.

Signage regarding the safe-handling, storage, and disposal of cleaning chemicals and products is permanently posted in a highly visible area of the cleaning equipment storage center.

### High Performance Floor Maintenance Protocol

1. For all floors in the building, the following protocol will be used:

- Resilient tile and hard flooring coating systems, including floor finishes and restoration products, will be slip resistant (as defined by ASTM Std D-2047).
  - The floor finish product and maintenance regime will be matched to produce the required appearance while minimizing the maintenance and prolonging the useful life prior to stripping.
  - Strip and wax every six months and buff between stripping as needed.
2. Hard Floor and Carpet Cleaning and Maintenance
- Hard floors, including tile, concrete, and wood surfaces, will be cleaned once a week with only sustainable cleaning products. No stripping or coatings will be applied to hard floor surfaces on a daily or weekly basis.
  - Carpets will be vacuumed daily with vacuum cleaners that meet the sustainability criteria listed later in this policy.
  - Once per month, the carpets will be inspected for stains and other damages. If feasible, the necessary areas will be inspected for stains and other damages. If feasible, the necessary areas will be spot cleaned with sustainable carpet cleaning materials. If damaged, the carpet tile will be replaced.
  - When carpet extraction equipment must be used, methods to reduce chemical usage will be implemented.

#### Strategies for Reducing Toxic Chemical Use for Laundry, Ware Washing, and Other Cleaning Activities

1. Cleaning staff and building occupants will be supplied with safe cleaning chemicals that meets the sustainability criteria described in the Sustainable Cleaning Products above.
2. Dish soaps and laundry detergent meeting EPA safer Choice Standard will be supplied for ware washing and laundry.
3. For surface cleaning, ionized water cleaning devices (using only water) will be used as much as possible.

#### Sustainable Cleaning Equipment

Sustainable Cleaning Equipment Purchases include those that meet the following criteria:

1. All Equipment
  - Powered equipment ergonomically designed to reduce minimize vibration, noise and user fatigue in accordance with ISO 5349-1 for arm vibrations, ISO 2631—1 for vibration to the whole body, and ISO 11201 for sound pressure at operator’s ear.
  - Equipment designed to reduce potential damage to building surfaces by using safeguards, such as rollers or rubber bumpers.
  - Powered floor maintenance equipment operating at a sound level below 70dBA.
  - Where appropriate, active micro fiber technology be used to reduce cleaning chemical consumption and prolong life of disposable scrubbing pads
  - Vacuums
  - Certified by Carpet & Rug Institute “Green Label” testing program and must operate less than 70dBA.

2. Carpet Extractors
  - Certified by Carpet & Rug Institute's "Seal of Approval" Testing Program.
3. Propane-powered floor equipment
  - Equipped with catalytic converter/muffler which meet the CARB/EPA standards for the specific engine size.
  - Operate with a sound level less than 90dBA.
4. Automated scrubbing machines
  - Equipped with environmentally preferable gel batteries.
  - Equipped with variable-speed feed pumps to optimize the use of cleaning fluids.
  - Where appropriate, active micro fiber technology be used to reduce cleaning chemical consumption and prolong life of disposable scrubbing pads.
  - Operating at a sound level below 70dBA.

Specifications for all janitorial equipment will be kept on file and updated continuously.

#### Guidelines for Storing Chemicals

- Store chemicals in their original containers with a legible label from the manufacturer
- Try to eliminate keeping half stocked items in storage, only use what is required
- If using working containers for storing chemicals they should be clearly marked and individually identified with the name of the chemical or product, the name and address of the manufacturer and the potential hazard of the chemical
- Storing chemicals away from food and food prep areas

#### Handling Spills

In the event of a chemical spill, the individual(s) who caused the spill is responsible for prompt and proper clean-up. Improper clean-up of a chemical spill may result in injury, illness, fire, a release to the environment, or property damage. Before beginning work with chemicals, one should be sure that he or she has adequate training for cleaning up small spills, and that the appropriate types and amounts of spill clean-up materials and personal protective equipment are immediately available.

- Setup safety pylons to ensure the safety of others, and to avoid slips and further incident
- Use absorbent materials to clean up the spill immediately.
- Wash the spilled area with warm water and approved Green Seal cleaning product for the applicable surface
- Ensure area has completely dried before removing safety pylons and occupant travel can resume.

#### Ongoing Tracking

The cleaning vendor is required to complete a green cleaning products and materials purchases log each month, detailing which cleaning supplies were purchased, purchase date, unit price, number of units purchased, and sustainability criteria met by the purchased product. All cleaning products must be entered



into the log, regardless of whether the product meets sustainability criteria.

Additionally, bi-annual APPA audits are recommended to evaluate cleanliness. As a part of the audits, the auditors interview cleaning staff to ensure that the cleaning and hard floor and carpet maintenance system is being consistently used. The responsible party is responsible for recording the results of the audits in the management records, following up with any cleaning staff to provide additional training and/or guidance and recording these actions.

#### Quality Assurance/Quality Control Processes

The responsible party will evaluate the green cleaning policy on a quarterly basis to evaluate progress towards the implementation goals. If any cleaning product or equipment purchases are not being recorded properly, the responsible party will inform the appropriate individuals to ensure that activities are recorded moving forward. The responsible party will evaluate the results of the cleaning audits to determine whether the building is being sufficiently cleaned and whether the standard cleaning procedures are being properly executed.

In addition, if any implementation goals are not being met, the responsible party will investigate the situation and will work with the individuals purchasing the materials and equipment or using the equipment. The responsible party will evaluate whether updates are necessary to the in order to achieve the implementation goals.

Any revisions that are made to the policy will be incorporated into the next training cycle for the cleaning staff.

#### Resources & References

- [EPA Design for Environment \(Dfe\)](#)
- [EPA Green Cleaning Standards and Product Recommendations](#)
- [EU Ecolabel Product Catalogue](#)
- [Forest Stewardship Council \(FSC\)](#)
- [Green Seal](#)

## **APPENDIX B: INTEGRATED PEST MANAGEMENT**

All areas of the Bloomberg office space will utilize IPM techniques where possible. In tenant spaces where IPM is provided by base building vendor, policy should be shared with building management.

The vendor will employ the following techniques in managed facilities:

**a. Monitoring**

The pest management vendor should implement a tracking tool to monitor each pest. The monitoring method and schedule, and the person in charge of monitoring, should be tracked.

**b. Environmental Controls**

Facilities management and the vendor will ensure the intentional manipulation of the environment to reduce pest's accessibility to food, water and shelter.

**c. Mechanical Controls**

- i. Direct mechanical controls should be directed at destroying a pest and/or its habitat with traps – rat, mouse, insects, etc.
- ii. Remove of nests and/or webs
- iii. Seal cracks or crevices where insects and/or rodents may enter

**d. Organic Controls**

Defer to pest management chemicals that are derived from an organic compound such as tree bark or flowers and comes in the forms of oils or dusts and can be highly effective in pest control.

**e. Least Toxic Products**

Least toxic pesticide applies to a pesticide product that, other than rodent bait, is applied in a self-contained, enclosed bait station placed in an inaccessible location, or applied in a gel that is neither visible nor accessible.

- i. Contains active ingredients and known inert ingredients that meet the least toxic Tier 3 hazard ingredient under the City and County of San Francisco's hazard screening protocol

**f. Chemical Controls**

Defer to pesticides that are used to kill infesting pests as the last resort for pest control in managed facilities.

### Rodent Control

1. Trapping Devices

- a. All trapping devices will be in protected areas and concealed from plain view so as not to be affected by routine cleaning and other operations.

- b. Trapping devices shall be logged in a vendor log.
  - c. Dispose all trapped rodents and rodent carcasses in an appropriate manner.
2. Rodenticides
- a. All rodenticides, regardless of packaging, will be placed in an EPA-approved tamper-resistant bait box (where applicable) or a secure location; a secure location is inaccessible to children, pets, wildlife, and domestic animals.
  - b. Rodenticides will only be used outside the building.
3. Rodent Baits
- a. Rodent baits may not be considered least-toxic and always require that universal notification be issued.
  - b. Rodent baits shall only be used if they are solid blocks placed in locked outdoor dispensers.
  - c. No second-generation or single feed rodent baits shall be used if the building is adjacent to parkland, wild areas, or other spaces where wildlife may be affected.
4. Bait Boxes
- a. All bait boxes will be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms.
  - b. All bait boxes shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
  - c. The lids of all bait boxes shall be securely locked or fastened shut.
  - d. All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface.
  - e. Bait shall be secured in the feeding chamber of the box instead of the runway or entryways of the box.
  - f. All bait boxes shall be labeled on the inside with the address, dated at the time of installation and each servicing; and name of the vendor's business, if used.
  - g. Bait boxes shall only be used outside the building.

#### Insect Control

1. Non-Pesticide Methods
- a. Employ non-chemical methods of control wherever possible.
  - b. Such methods may include the use of trapping devices and vacuums rather than pesticide sprays to cleanout cockroach, ant or other insect infestations.
2. Monitoring: Sticky traps shall be used to monitor and evaluate indoor insect control.

3. Cracks and Crevices: Apply all insecticides as “crack and crevice” treatments only, meaning the insecticide is not visible to a bystander during or after the application process because it is concentrated and applied to the cracks and crevices only.
4. Bait Methods
  - a. Bait application shall be the standard pesticide technology for cockroach and ant control
  - b. Use bait as a method of insect control in all cases unless some circumstance calls for alternative forms of control in which case the building’s approval is required
5. Insecticides
  - a. Application of insecticides to exposed surfaces or as space sprays is generally an unacceptable method of treatment. If used, management approval is required.
  - b. No surface application or space spray shall be made while occupants are in the space.
  - c. In the case of such an application, the facilities team shall take all necessary precautions to ensure occupant safety and the containment of the pesticide to the site of application.
6. Pesticides
  - a. Apply all pesticides according to the product instructions and must be registered with the U.S. Environmental Protection Agency (EPA), state and/or local jurisdiction. For properties outside the United States, comply with all federal and local regulations regarding Environmental Tobacco Smoke and application of pesticides, and other Indoor Air Quality policies as applicable.
  - b. Approved Products: The vendor will only use least toxic chemical pesticides without direct approval from the building.
  - c. Pesticide Storage: The vendor shall not store any pesticide product in the office without management’s consent or instruction.
7. Application
  - a. Application shall be on an as-needed basis.
  - b. The application of pesticides in any area should not occur until pest-specific action thresholds are met and confirmed with monitoring and inspection.
  - c. Action thresholds can be modified when pests have not met thresholds but are nuisance or disruptive to occupants.
  - d. Written approval must be granted by the management prior to any pesticide application as a preventative measure.
  - e. Routine pest control visits must not disrupt occupant productivity nor pose a threat to occupant health or wellbeing.

- f. If pest control visits must occur during the hours of building occupancy, ensure minimal disruption.
  - g. Observe all federal, state, and local safety and health requirements at all times. Where there is a conflict between applicable regulations, the most stringent will apply.
8. Minimization of Risk
- a. When pesticide use is necessary, apply the least hazardous material and use precise application techniques in order to use a minimal quantity of product.
  - b. A least toxic chemical pesticide, is any pesticide product for which all active ingredients and known inert ingredients meet the least toxic Tier III Hazard criteria under the City and Country of San Francisco hazard screening protocol.
  - c. Least toxic also applies to any pesticide product, other than rodent bait that is applied in a self-contained, enclosed bait station placed in an inaccessible location.
  - d. Under extreme conditions, use of pesticides that do not meet the definition of least toxic may be used when necessary.
  - e. Extreme Conditions
    - i. Conditions are considered extreme (thus requiring an emergency pesticide application) in the case of an imminent threat to human health or the structural integrity of the building due to pests.
    - ii. Discuss with facilities management prior to use giving a full description of the pesticide's use - where, when and how it will be used.
    - iii. MSDS and Labels shall be sent to facilities management and placed within the site logbook, prior to use.
9. Notifications
- a. In the case of an emergency application, no less than 24-hour notice will be given.
  - b. Post notification in the building as well as provide written notice to the building at least 24 hours prior to pesticide application.
  - c. Facilities management shall contact the occupants located in the treated area as necessary.
10. Pesticide Handling: Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, state, and local laws and regulations.
11. Cautionary Labeling for Pesticides: Law requires that precautionary statements and signal words be included on all pesticide labels. This does not apply to non-toxic or "natural" materials. If none of the following warnings are provided, do not use the pesticide.
- a. DANGER-A taste to a teaspoonful taken by mouth could kill an average-sized adult.
  - b. WARNING-A teaspoonful to an ounce taken by mouth could kill an average-sized adult.

- c. CAUTION-An ounce to over a pint taken by mouth could kill an average-sized adult

## **APPENDIX C: BLOOMBERG SUPPLIER CODE OF CONDUCT**

Sustainability runs through everything we do at Bloomberg. Sustainability is at the core of decisions we make and is viewed as a key business driver for our products and services, internal operations and community engagement. Bloomberg takes a holistic view of sustainability. Our sustainability program integrates environmental, social, and governance factors into how we manage our internal operations and develop our products.

As such, we are committed to working with vendors who operate in a responsible and sustainable manner. The Bloomberg Supplier Code of Conduct (this “Code”) defines our minimum requirements with respect to the environmental, social and governance performance of our Suppliers. Suppliers are responsible to ensure their sub-contractors, business partners and suppliers (the “Supply Chain”) act in a manner consistent with this Code.

### **The Code**

Bloomberg requires Suppliers to operate in accordance with the principles set forth in this Code and in full compliance with all applicable laws and regulations of the countries in which it operates. In instances where this Code requires Suppliers to operate to a higher standard than what is required by local law, Bloomberg requires Suppliers and the Supply Chain comply with this Code. Suppliers shall immediately notify Bloomberg of any conflict between this Code and local laws and/or regulations. If compliance with this Code might violate or conflict with local laws and/or regulations, we require Suppliers to promptly notify Bloomberg and explain how they intend to operate in a responsible manner.

If Suppliers identify any non-compliance with this Code, they are required to take corrective action in a timely manner. Failure to take timely corrective action may result in specific measures imposed by Bloomberg, including but not limited to the withdrawal of business.

Suppliers shall not provide, use or rely on the use of falsified documents or records for legal compliance or for meeting the requirements of this Code.

This Code is comprised of five sections: Section A - Labor and Human Rights; Section B - Health and Safety; Section C - Environmental; Section D - Ethics; and Section E - Management Systems.

Bloomberg requires Suppliers to uphold the following standards:

### **A. LABOR AND HUMAN RIGHTS**

Suppliers shall commit to upholding the human rights of workers and treating them with dignity and respect in accordance with the principles and guidelines of the International Labor Organization and United Nations. This applies to all workers including temporary, migrant, student, contract, direct employees, and any other type of worker. The recognized standards, as set out at the end of this Code, were used as references in preparing the Code and may be a useful source of additional information.

#### **1) Freely Chosen Employment**

All work must be conducted on a voluntary basis and not under threat of any penalty or sanctions. Forced, bonded (including debt bondage) or indentured labor, involuntary prison labor, slavery or trafficking of persons shall not be used. This includes transporting, harboring, recruiting, transferring or receiving persons by means of threat, force, coercion, abduction or fraud for labor or services.

There shall be no unreasonable restrictions on workers' freedom of movement in the facility or in regard to the entering or exiting of company-provided facilities.

As part of the hiring process, workers must be provided with a written employment agreement (or offer letter where applicable) in their native language that contains a description of terms and conditions of employment prior to the worker departing from his or her country of origin. All work must be voluntary and workers shall be free to leave work at any time or terminate their employment.

Employers and agents may not hold or otherwise destroy, conceal, confiscate or deny access by employees to their identity or immigration documents, such as government-issued identification, passports or work permits, unless such holdings are required by law. Workers shall not be required to pay deposits, or employer or agent recruitment fees, or other related fees for their employment. If any such fees are found to have been paid by workers, such fees shall be repaid to the worker.

Suppliers and the Supply Chain shall comply with all applicable anti-slavery and human trafficking laws, statutes, regulations and codes from time to time in force; and not engage in any activity, practice or conduct that would constitute an offence under sections 1, 2 or 4 of the UK's Modern Slavery Act 2015, as amended, or 48 CFR 52.222-50 Combating Trafficking in Persons of the US Code of Federal Regulations, as amended, or other laws or regulations in effect.

Suppliers shall include in their contracts with the Supply Chain anti-slavery and human trafficking provisions that are at least as onerous as those set out in this Code and shall implement due diligence practices to support this.

Suppliers shall notify Bloomberg as soon as they become aware of any actual or suspected slavery or human trafficking in a supply chain connected to Bloomberg. Suppliers shall maintain a complete set of records to trace the supply chain of all goods and services provided to Bloomberg which can be available for Bloomberg to view on request.

## **2) Child Labor Avoidance**

Suppliers are not allowed to use child labor in any aspect of its supply chain. For the purpose of compliance with this Code the term "child" refers to any person under the age of 15 (or 14 where the law of the country permits), or under the age for completing compulsory education, or under the minimum age for employment in the country in which services and/or products are being performed and/or manufactured (whichever is greatest). The use of legitimate workplace apprenticeship programs, which comply with all laws and regulations, is supported.

Workers under the age of 18 shall not perform work that is likely to jeopardize their health or safety, including night shifts, and working overtime.



Suppliers shall ensure proper management of student workers through proper maintenance of student records, rigorous due diligence of educational partners, and protection of students' rights in accordance with applicable law and regulations. Suppliers shall provide appropriate support and training to all student workers. In the absence of local law, the wage rate for student

workers, interns and apprentices shall be at least the same wage rate as other entry-level workers performing equal or similar tasks.

### **3) Working Hours**

Workweeks are not to exceed the maximum set by local law and should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. Workers shall be allowed at least one day off every seven days. The working of overtime must be voluntary and in compliance with other sections of this Code.

### **4) Wages and Benefits**

Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits (including paid leave and contributions for all social insurances). Suppliers shall pay workers promptly and in full without any deductions for disciplinary matters, or other deductions not provided for by local law. In compliance with local laws, workers shall be compensated for overtime at pay rates greater than regular hourly rates. For each pay period, workers shall be provided with a timely and understandable wage statement that includes sufficient information to verify accurate compensation for work performed. All use of temporary, dispatch and outsourced labor must be within the limits of the local law and in compliance with this Code.

### **5) Humane Treatment**

Bloomberg does not tolerate the harsh and inhumane treatment or threat of such treatment including but not limited to, any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse of workers. Suppliers shall establish clearly defined disciplinary policies and procedures to prevent such treatment and communicate those policies and procedures to workers.

### **6) Non-Discrimination**

Suppliers shall be committed to a workforce free of harassment and unlawful discrimination. Suppliers shall not engage in discrimination based on race, color, age, gender, sexual orientation, gender identity and expression, ethnicity or national origin, disability, pregnancy, religion, political affiliation, union membership, covered veteran status, protected genetic information or marital status, or any other category protected by applicable law in hiring and employment practices such as wages, promotions, rewards, and access to training. Suppliers shall apply the principle of equal pay for men and women workers for work of equal value. In addition, Suppliers shall not subject workers or potential workers to medical tests that could be used in a discriminatory way.

### **7) Freedom of Association**

Suppliers shall respect the right of all workers to form and join trade unions of their own choosing, to bargain collectively and to engage in peaceful assembly as well as respect the right of workers to refrain from such activities.

Workers and/or their representatives shall be able to openly communicate and share ideas and concerns, including grievances, with management regarding working conditions and management practices without fear of discrimination, reprisal, intimidation or harassment. If freedom of association and/or the right to collective bargaining are restricted by law, Suppliers shall, without violating applicable law itself, not interfere with efforts by workers to develop parallel means for independent and free association and collective bargaining.

## **B. HEALTH AND SAFETY**

Suppliers shall commit to providing and maintaining a safe work environment that integrates sound health and safety management practices into its business. Suppliers shall provide workers with appropriate health and safety training in their primary language and shall regularly monitor risks and hazards that may impact health and safety of workers, including but not limited to risks associated with structural integrity of facilities, fire, electrocution and hazards associated with exposure to noise dust and chemicals. Recognized management systems such as OHSAS 18001 and ILO Guidelines on Occupational Safety and Health were used as references in preparing the Code and may be a useful source of additional information for suppliers in providing and maintaining a safe work environment.

### **1) Occupational Safety**

Suppliers shall control workers' exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) through proper design, engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tagout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, Suppliers shall provide workers with appropriate, well-maintained, personal protective equipment and educational materials about risks to them associated with these hazards. Workers shall not be disciplined for raising safety concerns and shall be encouraged to raise safety concerns.

### **2) Emergency Preparedness**

Suppliers shall identify and assess potential emergency situations and events and minimize their impact by implementing emergency plans and response procedures including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans. Such plans and procedures shall focus on minimizing harm to life, the environment and property.

### **3) Occupational Injury and Illness**

Suppliers shall put procedures and systems in place to prevent, manage, track and report occupational injury and illness including provisions to: encourage worker reporting, classify and record injury and illness cases, provide necessary medical treatment, investigate cases and implement corrective actions to eliminate their causes, and facilitate the return of workers to work.

### **4) Industrial Hygiene**

Suppliers shall identify, evaluate and control workers' exposure to chemical, biological and physical agents. Suppliers must use engineering or administrative controls to control overexposures. When hazards

cannot be adequately controlled by such means, Suppliers shall protect worker health by adopting appropriate personal protective equipment programs.

#### **5) Physically Demanding Work**

Suppliers shall identify, evaluate and mitigate workers' exposure to the hazards of physically demanding tasks, including, but not limited to, manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks.

#### **6) Machine Safeguarding**

Suppliers shall evaluate production and other machinery for safety hazards. Where machinery presents an injury hazard to workers, Suppliers shall provide and properly maintain physical guards, interlocks and barriers.

#### **7) Sanitation, Food, and Housing**

Workers must have free and unrestricted access to clean toilet facilities, potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by Suppliers or labor agents shall be clean and safe, and include appropriate emergency egress, hot water for bathing and showering, adequate heat and ventilation, and reasonable personal space along with reasonable entry and exit privileges.

#### **8) Health and Safety Communication**

Suppliers shall provide workers with appropriate workplace health and safety training in their primary language. Health and safety related information shall be clearly posted in the facility.

### **C. ENVIRONMENTAL**

Suppliers shall commit to minimizing the adverse effects of its manufacturing operations on the community, environment and natural resources, and to safeguarding the health and safety of the public from such adverse effects. Recognized management systems such as ISO 14001 and the Eco Management and Audit System (EMAS) were used as references in preparing the Code and may be a useful source of additional information. Suppliers are expected to stay current with evolving industry standards and best practice and incorporate other such management system standards and guidelines as they deem relevant based on their industry expertise.

In addition to the environmental provisions outlined in this Code, suppliers must also comply with the policies and guidelines set forth in Bloomberg's Sustainability Operational Guidelines regarding:

- Facility Waste Management
- Green Cleaning Policy
- Green Events
- Integrated Pest Management
- Sustainable Design and Construction

The Bloomberg Sustainability Operational Guidelines can be accessed at <https://www.bloomberg.com/impact/downloads/>

### **1) Environmental Permits and Reporting**

Suppliers shall obtain and keep current all required environmental permits (e.g. discharge monitoring), approvals and registrations and shall comply with all operational and reporting requirements.

### **2) Pollution Prevention and Resource Reduction**

Suppliers shall reduce or eliminate waste of all types, including water and energy, at the source or by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials.

### **3) Hazardous Substances**

Suppliers shall identify and manage any chemicals and other materials that if released to the environment would pose a hazard and ensure the safe handling, movement, storage, use, recycling or reuse and disposal of such chemicals and other materials.

Suppliers shall comply with the Restriction of Hazardous Substances Directives included in the Institute of Electrical and Electronics Engineers (IEEE) publication 1680 (<http://grouper.ieee.org/groups/1680/>).

### **4) Wastewater and Solid Waste**

Suppliers shall implement a systematic approach to identify, manage, reduce, and responsibly dispose of or recycle solid waste (non-hazardous). Suppliers shall characterize, monitor, control and treat wastewater and solid waste generated from operations, industrial processes and sanitation facilities as required prior to discharge or disposal. In addition, Suppliers shall implement measures to reduce the generation of wastewater and conduct routine monitoring of the performance of its wastewater treatment systems.

### **5) Air Emissions**

Suppliers shall characterize, monitor, control and treat air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations as required prior to discharge. Suppliers shall conduct routine monitoring of the performance of its air emission control systems.

### **6) Product Content Restrictions**

Suppliers shall adhere to all applicable laws, regulations and customer requirements regarding prohibition or restriction of specific substances, including labeling for recycling and disposal.

### **7) Storm Water Management**

Suppliers shall implement a systematic approach to prevent the contamination of storm water runoff. Suppliers shall prevent illegal discharges and spills from entering storm drains.

### **8) Energy Consumption and Greenhouse Gas Emissions**

Suppliers shall track and document energy consumption and greenhouse gas emissions at the facility and/or corporate level. Suppliers shall look for cost effective methods to improve energy efficiency and to minimize their energy consumption and greenhouse gas emissions.

## **D. ETHICS**

Suppliers shall commit to the highest standards of ethics in conducting all aspects of their business.

### **1) Business Integrity**

Suppliers shall have a zero tolerance policy that prohibits any and all forms of bribery, corruption, extortion, embezzlement (covering promising, offering, giving or accepting any bribes), and facilitation payments. All of Suppliers' business dealings shall be performed in a transparent manner and be accurately reflected in Suppliers' business books and records. Suppliers shall implement monitoring and enforcement procedures to ensure compliance with anti-corruption laws.

### **2) No Improper Advantage**

Suppliers shall not promise, offer, authorize, give or accept bribes or other means of obtaining undue or improper advantage. This prohibition covers promising, offering, authorizing, giving or accepting anything of value, either directly or indirectly through a third party, in order to obtain or retain business, direct business to any person, or otherwise gain an improper advantage.

### **3) Disclosure of Information**

Suppliers shall disclose information regarding labor, health and safety, environmental practices, business activities, structure, financial situation and performance in accordance with applicable regulations and prevailing industry practices. Suppliers shall not falsify records or misrepresent conditions or practices in the supply chain. Bloomberg reserves the right to request Suppliers' anti-corruption policies and procedures as well as the policies and procedures of the Supply Chain.

### **4) Intellectual Property**

Suppliers shall respect intellectual property rights and safeguard customer information. Suppliers shall manage the transfer of technology and know-how in a manner that protects intellectual property rights.

### **5) Fair Business, Advertising and Competition**

Suppliers shall uphold standards of fair business, advertising and competition and have appropriate means to safeguard customer information.

### **6) Protection of Identity and Non-retaliation**

Suppliers shall provide a mechanism by which employees can anonymously and confidentially report workplace grievances and / or alleged improper conduct of an employee, company officer, public official or official body without fear of retaliation. Suppliers shall communicate to their personnel the process by which they are able to raise any such concerns.

### **7) Responsible Sourcing of Minerals**

Supplier shall attest that the items to be procured by Customer are manufactured without the use of any materials identified as "Conflict Minerals", or other such designated mineral/material within the scope of the US Dodd-Frank Wall Street reform and Consumer Protection Act 2010, as amended.

### **8) Privacy**

Suppliers shall protect the reasonable privacy expectations of personal information of everyone they do business with, including suppliers, customers, consumers and employees. Suppliers shall comply with privacy and information security laws and regulatory requirements when personal information is collected, stored, processed, transmitted, and shared.

## **E. MANAGEMENT SYSTEM**

Suppliers shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure: (a) compliance with applicable laws, regulations and customer requirements related to Suppliers' operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate continual improvement.

### **1) Company Commitment**

Suppliers shall have a corporate environmental, social and governance responsibility policy statement that affirms their commitment to compliance and continual improvement with such policy and is endorsed by executive management.

### **2) Management Accountability and Responsibility**

Suppliers shall clearly identify company representative(s) responsible for ensuring implementation of the management systems and associated programs. Senior management shall review the status of the management system on a regular basis.

### **3) Legal and Customer Requirements**

Suppliers shall have a process to identify, monitor and understand applicable laws, regulations and customer requirements, including the requirements of this Code.

### **4) Risk Assessment and Risk Management**

Suppliers shall have a process to identify the environmental, health and safety and labor practices and ethics risks associated with Suppliers' operations. Suppliers shall determine the relative significance for each risk and implement appropriate procedural and physical controls to control the identified risks and ensure regulatory compliance.

### **5) Improvement Objectives**

Suppliers shall have written performance objectives, targets and implementation plans to improve their environmental, social and governance performance, including a periodic assessment of their performance in achieving those objectives.

### **6) Training**

Suppliers shall have programs to train managers and workers on how to implement their policies, procedures and improvement objectives, and to meet applicable legal and regulatory requirements.

### **7) Communication**

Suppliers shall have a process for communicating clear and accurate information about their policies, practices, expectations and performance to workers, suppliers and customers.

### **8) Worker Feedback and Participation**

Suppliers shall have ongoing processes to assess employees' understanding of the practices and conditions covered by this Code and to obtain feedback on such practices and conditions to foster continuous

improvement. This shall include a mechanism by which employees can report alleged non-compliance with this Code and other ethical matters.

**9) Audits and Assessments**

Suppliers shall periodically assess and audit their policies, practices and performance to ensure conformity to legal and regulatory requirements, the content of this Code and customer contractual requirements related to social and environmental responsibility.

**10) Corrective Action Process**

Suppliers shall have a process to timely correct any and all deficiencies identified by internal or external assessments, inspections, investigations and reviews.

**11) Documentation and Records**

Suppliers shall create and maintain documents and records to ensure regulatory compliance and conformity to Suppliers' requirements which shall include appropriate confidentiality measures to protect privacy.

**12) Supplier Responsibility**

Suppliers shall have a process to communicate and monitor the requirements of this Code to the Supply Chain and to ensure compliance with this Code.

I, an authorized representative of \_\_\_\_\_ (name of Supplier), hereby acknowledge and agree to abide by Bloomberg's Supplier Code of Conduct and ensure that the employees, officer, directors, agents, suppliers, representatives of \_\_\_\_\_ (name of Supplier) are aware of and abide by this Code for the provision of goods and services to Bloomberg and during the performance of all agreements entered into with Bloomberg.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**References:**

The following standards were used in preparing this Code and may be a useful source of additional information. Bloomberg is committed to the principles set forth in this Code and as such continuously reviews this Code and relevant external guidance to ensure the Code is updated as needed to align with current industry practices and requirements.

1. EICC, Electronic Industry Citizenship Coalition Code of Conduct, [http://www.eiccoalition.org/media/docs/EICCCodeofConduct5\\_English.pdf](http://www.eiccoalition.org/media/docs/EICCCodeofConduct5_English.pdf)
2. Dodd-Frank Wall Street Reform and Consumer Protection Act, <http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf>
3. Eco Management & Audit System [www.quality.co.uk/emas.htm](http://www.quality.co.uk/emas.htm)

4. Ethical Trading Initiative [www.ethicaltrade.org/](http://www.ethicaltrade.org/)
5. ILO Code of Practice in Safety and Health,  
[www.ilo.org/public/english/protection/safework/cops/english/download/e000013.pdf](http://www.ilo.org/public/english/protection/safework/cops/english/download/e000013.pdf)
6. ILO International Labor Standards,  
[www.ilo.org/public/english/standards/norm/whatare/fundam/index.htm](http://www.ilo.org/public/english/standards/norm/whatare/fundam/index.htm)
7. ISO 14001 [www.iso.org](http://www.iso.org)
8. National Fire Protection Association [www.nfpa.org/catalog/home/AboutNFPA/index.asp](http://www.nfpa.org/catalog/home/AboutNFPA/index.asp)
9. OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas <http://www.oecd.org/corporate/mne/mining.htm>
10. OECD Guidelines for Multinational Enterprises [www.oecd.org/mne/](http://www.oecd.org/mne/)
11. daviOHSAS 18001 <http://www.bsigroup.com/en-GB/ohsas-18001-occupational-health-and-safety/>
12. Universal Declaration of Human Rights [www.un.org/Overview/rights.html](http://www.un.org/Overview/rights.html)
13. United Nations Convention Against Corruption



**APPENDIX D: ENVIRONMENTALLY PREFERRED PURCHASING - PRODUCT-SPECIFIC GUIDELINES**

<b>ONGOING CONSUMABLES</b>	
<b>Defined</b>	Materials with a low cost per unit that are regularly used and replaced through building operations.
<b>Product</b>	<b>EPP Requirements</b>
<b>Batteries</b>	1) Batteries must be rechargeable
<b>Green Cleaning Products</b>	1) Cleaners – see <a href="#">Green Cleaning Policy</a> 2) Hand soaps and hand sanitizers must meet one or more of the following standards: <ol style="list-style-type: none"> <li>No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations</li> <li>Green Seal GS-41</li> <li>UL Ecologo 2784, for hand cleaners and hand soaps</li> <li>UL Ecologo 2783, for hand sanitizers</li> <li>EPA Safer Choice Standard</li> </ol> 3) Disposable janitorial paper products and trash bags shall meet the minimum requirements of one or more of the following programs for the applicable product category: <ol style="list-style-type: none"> <li>US EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners – require plastic trash bags have 10% - 100% postconsumer recycled content</li> <li>California integrated waste management requirements, for plastic trash can liners</li> <li>Green Seal GS-09 for Paper Towels and Napkins</li> <li>Green Seal GS-01 for Tissue Paper</li> <li>UL Ecologo 175 for Toilet Tissue</li> <li>UL Ecologo 175 for Hand Towels</li> <li>Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers</li> <li>FSC Certification for fiber procurement</li> </ol>
<b>Toner Cartridges</b>	1) Toner cartridges for laser printers should be remanufactured

Product	EPP Requirements
<b>Paper Products</b>	<ol style="list-style-type: none"> <li>1) Meets or exceeds postconsumer recycled content levels listed in the <a href="#">U.S. Environmental Protection Agency Comprehensive Procurement Guideline</a></li> <li>2) Forest Stewardship Council (FSC) certified, when available</li> </ol>
<b>Lamps</b>	<ol style="list-style-type: none"> <li>3) Wherever possible choose LED lamps over CFLs, as they contain no mercury</li> <li>4) Reduced Mercury – 70 picograms of mercury per lumen-hour or less for all mercury-containing lamps</li> <li>5) Choose energy efficient lamps, ENERGY STAR certified preferred</li> </ol>
<b>Pantry Disposable Products</b>	<ol style="list-style-type: none"> <li>1) In offices where composting programs are available and utilized, all pantry products that can be compostable should be. <ol style="list-style-type: none"> <li>a. This includes paper cups and plates, napkins, utensils, lids and covers.</li> <li>b. Products must meet the ASTM 6400 compostable standard or an accepted alternative based on local waste vendor capabilities.</li> </ol> </li> <li>2) If compostable products are not available, or cannot be composted by waste vendor, recyclable products should be purchased.</li> </ol>

DURABLE GOODS	
<b>Defined</b>	Goods that have a useful life of 2 years or more and are replaced infrequently or may require capital program outlays to purchase.
<b>Examples</b>	<ol style="list-style-type: none"> <li>1. Office Equipment – computers, monitors, copiers printers, scanners, fax machines</li> <li>2. Appliances – refrigerators, dishwashers, water coolers</li> <li>3. External Power Adapters</li> <li>4. Televisions and other audio-visual equipment</li> </ol>
Product	EPP Requirements
<b>Electric-powered Equipment</b>	<ol style="list-style-type: none"> <li>1) Has a silver Electronic Product Environmental Assessment Tool (EPEAT) rating or better</li> <li>2) If EPEAT rating does not apply, the product should be ENERGY STAR labeled</li> </ol>
<b>Cleaning Equipment</b>	See <a href="#">Green Cleaning Policy</a>

<b>ELECTRONICS MANUFACTURING (BLP CORE BRANDED PRODUCTS)</b>	
<b>Defined</b>	Electronic products that we design, produce and distribute that incorporate environmentally responsible materials and practices.
<b>Products &amp; Requirements</b>	Products and Requirements: Bloomberg branded core products, keyboards and B-Units manufactured by third-party vendors and their sub-contractors. Vendors procure raw materials, individual components and assemble products in accordance with Bloomberg’s specifications that must identify sustainability criteria regarding 1) material and chemicals, 2) product energy efficiency and 3) design for longevity and end of life.
<b>B-Unit and Keyboard Requirements</b>	
<b>Materials and Chemicals</b>	<ol style="list-style-type: none"> <li>1. Toxic components, chemicals or elements will not be included in the product composition or manufacturing process. These chemicals include but are not limited to: PVC, BFR, all phthalates, beryllium (including alloys &amp; compounds), antimony &amp; antimony compounds, lead and chrome.</li> <li>2. Conflict-free Minerals: If the B-Unit or keyboard requires a mineral identified as a “conflict mineral”, the vendor and its sub-contractors may only include such minerals if they were responsibly and ethically sourced from a conflict-free area in accordance with all local, federal and international laws and regulations and the Bloomberg Supplier Code of Conduct.</li> <li>3. RoHS: Product must meet or exceed RoHS standard which restricts the use of the following materials: <ol style="list-style-type: none"> <li>a. Lead (Pb): &lt;1000 ppm</li> <li>b. Mercury (Hg): &lt; 100 ppm</li> <li>c. Cadmium (Cd): &lt; 100 ppm</li> <li>d. Hexavalent Chromium: (Cr VI) &lt; 1000 ppm</li> <li>e. Polybrominated Biphenyls (PBB): &lt; 1000 ppm</li> <li>f. Polybrominated Diphenyl Ethers (PBDE): &lt; 1000 ppm</li> <li>g. Bis(2-Ethylhexyl) phthalate (DEHP): &lt; 1000 ppm</li> <li>h. Benzyl butyl phthalate (BBP): &lt; 1000 ppm</li> <li>i. Dibutyl phthalate (DBP): &lt; 1000 ppm</li> <li>j. Diisobutyl phthalate (DIBP): &lt; 1000 ppm</li> </ol> </li> </ol>
<b>Product Energy Efficiency</b>	1) B-Units and keyboards should be ENERGY STAR efficiency guidelines.
<b>Designed for Longevity and End of Life</b>	1) The longer a product can avoid replacement, the less material will be needed to produce new products.

	2) Since Bloomberg owns/maintains all branded keyboards & B-Units we are able to recycle all products returned to us so that those items are refurbished and redistributed to customers.
<b>GRAPHIC DESIGN PRODUCTS</b>	
<b>Defined</b>	Includes an assessment of the environmental impacts of the full life cycle of graphic design products (packaging, printed materials, publications, etc.). The assessment should consider raw material selection, transformation, manufacturing, transportation, use, and disposal.
<b>Sustainable Practices</b>	<ol style="list-style-type: none"> <li>1. Reduce the amount materials required for production</li> <li>2. Use paper and materials made with recycled, post-consumer waste</li> <li>3. Print with low-VOC and non-toxic inks</li> <li>4. Use production/distribution methods that require the least amount of transport</li> <li>5. Consider digital when appropriate</li> <li>6. Always consult in-house services (e.g., BLP Ink) before utilizing external services, but when using external printing services, consider using local source first, to minimize the distance traveled, giving preference to companies that employ and promote sustainable practices</li> </ol>
<b>Product</b>	<b>EPP Requirements</b>
<b>Paper</b>	<ol style="list-style-type: none"> <li>1. Use chlorine free-TFC, postindustrial recycled content, postconsumer recycled content, FSC certified, recycled fabric content, or tree-free paper (i.e. Kenaf or Hemp)</li> <li>2. When sustainable options above are not available, use paper with at least 30% post-consumer recycled material</li> <li>3. Use standard sizes and die cutting options to minimize waste</li> </ol>
<b>Ink</b>	<ol style="list-style-type: none"> <li>1. Use non-toxic, non-metallic, non-fluorescent, low VOC, vegetable or soy-based ink</li> <li>2. Eliminate the use of PMS 811 (fluorescent orange) in favor of non-toxic and nearly identical orange</li> <li>3. Switch to PMS 151 for coated stock or PMS 136 for uncoated stock</li> </ol>
<b>Packaging</b>	<ol style="list-style-type: none"> <li>1. Minimize or eliminate packaging whenever possible</li> <li>2. If must use packaging, choose materials that are light weight and can be recycled, bio-degraded or composted at the end of life</li> <li>3. Try to avoid using petroleum based plastic fillers and packaging such as packing peanuts</li> </ol>

<b>PROMOTIONAL ITEMS (aka "PREMIUMS")</b>	
<b>Defined</b>	Branded merchandise with a Bloomberg logo given away to clients and potential clients to promote the company and our products.
<b>Sustainable Practices</b>	<ul style="list-style-type: none"> <li>• The end-user should consider the environmental impact of the promotional item's manufacturing process, materials and chemicals and end of life and consideration should be given to items that have minimal impact to the environment throughout the product's lifecycle.</li> <li>• All items should be made with recycled, non-hazardous, ethically sourced materials and should be in compliance with all applicable laws in the location of manufacturing and consumption.</li> <li>• Selection of promotional items should promote sustainable practices and minimize impact to the environment. (i.e., reusable water bottles, mugs, USB sticks loaded with digital versions of marketing material for distribution).</li> <li>• The packaging of the individual items should balance the need to maintain the quality of the product during shipment and storage and to minimize the impact on the environment. Where appropriate, the items should not be individually packaged, shrink wrapped etc.</li> <li>• The product should be sourced locally to a targeted region to minimize shipping distance.</li> </ul>

## **APPENDIX E: CHAIN OF CUSTODY QUALITY SYSTEM REQUIREMENTS**

Bloomberg will work with all relevant suppliers to ensure that a proper CoC system is in place, which enables the Company (supplier) to track a product's entire life cycle from manufacture to disposal. The following systems need to be put in place for any project deemed substantial to Bloomberg and/or the environment.

### **Quality System Requirements**

#### **1. Documented Procedures**

Company shall have documented procedures that detail the following: 1) the company's procedures for the tracking and handling of certified material from ordering through final product sales and shipping or use; 2) the responsible personnel or staff position for the control system; 3) the forms and records used for certified tracking and handling; 4) the procedures for compiling volume summary data for certified purchases, production, and sales per product group, supplier/customer, and month; 5) the procedures for labeling and logo use (if applicable); 6) the protocol for maintaining records that pertain to certification

#### **2. Responsibility**

- A designated individual shall be responsible for COC controls and compliance.
- Key personnel shall be designated and informed of their specific responsibilities within the Chain-of-Custody control system.

#### **3. Product Group Assignment**

- A product group schedule shall be prepared that includes: 1) the species of each product group; and 2) a designation of the product group as either 100% ethically sourced or percentage that is responsibly sourced.
- The product group schedule shall be kept up-to-date and available upon request.

#### **4. Training**

- Training requirements for all applicable staff shall be clearly defined.
- Training/orientation on the handling and representation of certified products shall be completed.
- Training records shall be kept to demonstrate training that has taken place.

#### **5. Records and Reports**

- Quantity records of certified material purchasing/receiving, production (including applicable conversion factors), and certified sales and shipping shall be maintained and readily available in summary format for annual audit review.
- Records shall be maintained for all purchases, processing, and sales of certified products, as well as marketing, advertising, and any other public information pertaining to certification for a minimum of 5 years.

## APPENDIX F: CONSTRUCTION IAQ MANAGEMENT PLAN

### I. SCOPE

This plan applies to [PROJECT NAME] that occurs in [BUILDING NAME] located at [BUILDING ADDRESS]. This plan includes guidelines for managing indoor air quality for the above project.

### II. GOALS

IAQ Best Management Practices will be implemented for 100% of the project and 100% of maintenance activities requiring material installation/repair lasting longer than one hour.

### III. ROLES AND RESPONSIBILITIES

The primary responsible party for this plan is [RESPONSIBLE PARTY NAME]. [HE/SHE] is responsible for ensuring that this plan is executed and that any contracted vendors involved are informed of and adhere to the procedures outlined in this policy. If at any time updates are required to this plan, the responsible party will ensure that the appropriate individuals are informed of the updates.

### IV. STANDARD OPERATING PROCEDURES AND IMPLEMENTATION STRATEGIES

The following Best Management Practices for indoor air quality control will be implemented as applicable for the project and for maintenance activities requiring material installation/repair lasting longer than one hour. The responsible party is ultimately responsible for ensuring that these control measures are implemented:

- During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 2<sup>nd</sup> edition, 2007, ANSI/SMACNA 008-2008, Chapter 3. The following SMACNA guidelines apply to teams seeking this credit:

#### HVAC Protection

Keep contaminants out of the HVAC system. Do not run permanently installed equipment if possible, or maintain proper filtration if it is used:

- If conditioning is required during construction, use supplementary HVAC units instead of permanently installed equipment if possible.
- If permanently installed HVAC system must be used during construction, install filtration to protect the return (negative pressure) side of the system. Replace these filters regularly during construction.
- Seal all ductwork, registers, diffusers, and returns with plastic when stored on site or not in service. Seal unfinished runs of ductwork at the end of each day.
- Replace all filtration media before occupancy.
- Do not store materials in mechanical rooms, to reduce potential debris and contamination to mechanical systems.

### **Source Control**

Keep sources of contaminants out of the building and have a plan to eliminate any that are introduced.

- Use low-toxicity and low-VOC materials to the greatest extent possible.
- Develop protocols for the use of any high-toxicity materials. Isolate areas where high-toxicity materials are being installed and use temporary ventilation for that area.
- Prevent exhaust fumes (from idling vehicles, equipment, and fossil-fueled tools) from entering the building.
- Enforce the no-smoking job site policy.
- Protect stored materials from moisture because absorbent materials exposed to moisture during construction can mold and degenerate long after installation. Store materials in dry conditions indoors, under cover, and off the ground or floor.
- If materials are improperly exposed to moisture, replace the material and consider testing air quality before occupant to make sure no mold contamination has occurred.

### **Pathway Interruption**

Prevent circulation of contaminated air when cutting concrete or wood, sanding drywall, installing VOC-emitting materials, or performing other activities that affect IAQ in other work spaces.

- Isolate areas of work to prevent contamination of other spaces, whether they are finished or not. Seal doorways, windows, or tent off areas as needed using temporary barriers, such as plastic separations. Provide walk-off mats at entryways to reduce introduced dirt and pollutants.
- Depressurize the work area to allow a differential between construction areas and clear areas. Exhaust to the outdoors using 100% outdoor air, if possible.
- Use dust guards and collectors on saws and other tools.

### **Housekeeping**

Maintaining a clean job site results in fewer IAQ contaminants to manage.

- Maintain good job site housekeeping daily. Use vacuum cleaners with high-efficiency particulate filters and use sweeping compounds or wetting agents for dust control when sweeping.
- Keep materials organized to improve job site safety as well as indoor air quality.

### **Scheduling**

Sequence construction activities to reduce air quality problems in new construction projects. For major renovations, coordinate construction activities to minimize or eliminate disruption of operations in occupied areas.



- Keep trades that affect IAQ physically isolated on site and separated from each other by the construction schedule. For example, schedule drywall finishing and carpet installation for different days or different sections of the building. Consider after-hours or weekend work if practical.
  - Install absorptive-finish materials after wet-applied materials have fully cured whenever possible. For example, install carpet and ceiling tile after paints and stains are completely dry.
  - If applicable, plan adequate time to conduct a flush-out and/or perform IAQ testing before occupancy, in compliance with EQ Credit Indoor Air Quality Assessment.
  - Remove all temporary filtration media and replace them with new filters before occupancy.
- Protect absorptive materials stored on-site and installed from moisture damage.
  - Do not operate permanently installed air-handling equipment during construction unless filtration media with a minimum efficiency reporting value (MERV) of 8, as determined by ASHRAE 52.2-2007, with errata (or equivalent filtration media class of F5 or higher, as defined by CEN Standard EN 779-2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance), are installed at each return air grille and return or transfer duct inlet opening such that there is no bypass around the filtration media. Immediately before occupancy, replace all filtration media with the final design filtration media, installed in accordance with the manufacture's recommendation.
  - Prohibit the use of tobacco products inside the building and within 25 feet or more if required by the local jurisdiction, of the building entrance at all times during construction. Consider prohibiting smoking on the entire job site.

[CONSIDER INCLUDING ADDITIONAL INFORMATION REGARDING THE INDOOR AIR QUALITY MANAGEMENT PRACTICES FOR THE BUILDING HERE]

#### **V. PERFORMANCE MEASUREMENT AND SCHEDULE FOR REASSESSMENT**

After project completion, the responsible party will evaluate whether the procedures described in this plan have been met. If changes are necessary to the plan, the responsible party will determine how best to change the plan procedures to meet the specified goals for ongoing maintenance activities. Indoor Air Quality practices will also be reviewed to ensure that any adjustments to the plan are made.

#### **VI. QUALITY ASSURANCE/QUALITY CONTROL PROCESSES**

The responsible party will oversee the work on the construction site to ensure that the procedures are being followed as required. [WEEKLY] construction meetings will include an agenda item to ensure that the Indoor Air Quality practices outlined in this plan are being implemented.

## APPENDIX G: CONSTRUCTION WASTE MANAGEMENT PLAN

### I. SCOPE

This plan applies to [PROJECT NAME] that occurs in [BUILDING NAME] located at [BUILDING ADDRESS]. This plan includes guidelines for disposing of waste generated from the above project accounting for all waste materials, including land-clearing debris, materials to be used for alternative daily cover (ADC), and other materials not contributing to diversion but not included in the diverted waste total.

### II. GOALS

Component	Goal	Performance Measurement Unit
Waste disposal from PROJECT NAME	[50% (1 POINT)/75% (2 POINTS)] of waste will be diverted from landfills	Volume/Weight

### III. ROLES AND RESPONSIBILITIES

The primary responsible party for this plan is [RESPONSIBLE PARTY NAME HERE]. [HE/SHE] is responsible for ensuring that this plan is executed and that any contracted vendors involved are informed of and adhere to the procedures outlined in this plan. If at any time updates are required to this plan, the responsible party will ensure that the appropriate individuals are informed of the updates.

### IV. STANDARD OPERATING PROCEDURES AND IMPLEMENTATION STRATEGIES

#### Effective Construction Waste Management Strategies

On-site separation (also known as source separation) is most viable if multiple bins are conveniently located and the general contractors enforce careful separation. A best practice for source separation is to target waste materials that are easily separated and have established recycling markets, such as steel, wood, and concrete.

On-site separation is preferable to commingling because separated wastes are more likely to actually be diverted from the landfill. Using easy-to-understanding multilingual or symbol-based signage helps prevent contamination of on-site source separation areas.

Commingling collection (or single-stream recycling) may be more appropriate for sites with limited storage area for waste containers. Recyclable materials are mixed in one container but sorted and processed at an off-site recycling facility, which separates them from the waste going to a landfill. Commingled waste may be considered only one material stream unless the facility can provide diversion rates for specific materials.

To count towards the corresponding credit (MR Credit Construction and Demolition Waste

Management), commingled recycling facilities must be able to provide diversion rates either specific to the project, or an average diversion rate for the facility that is regulated by the local or state authority. The average recycling rate for the facility must exclude ADC.

Donating surplus or architectural salvage or community donation is permissible provided the organization can verify and track the material, including how much is received and where it is going. Habitat for Humanity Restore is a commonly used donation facility in the U.S. and Canada.

Use of construction waste to infill mining pits is permissible only if the waste is “clean” and the work is overseen by the state or local government or a government-sponsored organization.

Leaving items on the curb for people to pick up is not acceptable. Dumping in the ocean is never permissible as a diversion strategy.

### **Implementation Strategies**

The responsible party will coordinate with the contracted vendors to discuss the scope of the project. The scope of the project must be determined and the materials to be used and discarded during the project must be identified. Packaging will be a consideration in the materials that will be discarded. The approximate volume of each type of waste will be broken out. Separate categories may include cardboard, wood products and cabinetry, drywall, tile, etc.

From this material flow, the five largest waste categories will be determined (both structural and nonstructural) – see attached Waste Report for detailed project waste information including approximated percentage of the overall project waste that the five largest waste categories represent. The responsible party will coordinate proper waste disposal and landfill diversion for these waste categories. This will involve contacting the appropriate vendors, scheduling haul dates, and ensuring properly sized storage areas for the construction waste. If necessary, a separate secured storage area will be secured for hazardous waste, such as paint. Hazardous materials must be tracked separately and not be included in the project total waste.

Once the waste disposal has been coordinated, the responsible party will write waste disposal instructions for each waste category and will distribute to the appropriate vendors.

For regular maintenance activities, the responsible party will ensure that the proper materials are recycled or composted.

### **Sorting Method**

C&D waste debris to be collected on-site and waste sorting and recycling to be performed off-site at separation, diversion and recycling facility(ies). For example, off-site sorting and recycling will be implemented using the following process:

- All demolition and construction waste material (mixed C&D waste) will be collected in mixed-waste containers on site and then trucked to a transfer station to be off-loaded by [WASTE HAULER NAME HERE] for sorting and recycling.

- Each container will be weighed to establish the total weight of the delivered material.
- Each container will be visually inspected at the transfer station to assess its contents. An estimate of the percentage of each waste material in the container will be made by the transfer station inspector. The percentage estimate will be based on the volume of each material, and then be converted to weight using standard volume-to-weight conversion provided by [RECYCLING FACILITY NAME]. Using this method, [RECYCLING FACILITY NAME] will document all materials that will be recycled, as well as those that will be disposed of in landfills.
- The responsible party will use the tickets and other documentation from [RECYCLING FACILITY NAME] to compile and document the monthly and overall off-site recycling rate.

[CONSIDER INCLUDING ADDITIONAL INFORMATION REGARDING THE BUILDING-SPECIFIC WASTE MANAGEMENT PROGRAM HERE]

**V. PERFORMANCE MEASUREMENT AND SCHEDULE FOR REASSESSMENT**

After project completion, the responsible party will evaluate whether the procedures described in this plan have been met. Waste logs will be evaluated against sustainability criteria and project goals. If changes are necessary to the plan, the responsible party will determine how best to change the plan procedures to meet the specified goals for ongoing maintenance activities.

**VI. QUALITY ASSURANCE/QUALITY CONTROL PROCESSES**

The responsible party will oversee the work on the construction site to ensure that the procedures are being followed as required. Waste reports will be retained to ensure that recycling goals are being met. Maintenance waste will be tracked on a monthly basis to ensure that recycling goals are being met.

## APPENDIX H: LEED SPECIFICATIONS

### 013500 LEED Requirements Part 1- General

#### 1.1 Summary

- A. Section includes general requirements and procedures for compliance with certain prerequisites and credits needed for Project to obtain "LEED Version 4 for Interior Design and Construction" (LEED v4 ID+C) [CERTIFICATION LEVEL] certification based on USGBC's LEED v4 ID+C.
- B. The LEED Project Manager will provide oversight and guidance and compile full submittal package for submission to GBCI.
- B. Construction manager is responsible for implementation, coordination, and documentation of LEED credit requirements during construction.
- C. Architect, engineer and consultants responsible for implementation, coordination and documentation of LEED credit requirements during design.
- D. Fulfillment of LEED Prerequisites and credits pursued by the owner is a requirement of the project.

#### 1.2 General Requirements

- A. Construction manager and contractor shall designate LEED representative(s). Construction managers LEED representative(s) shall be an individual responsible for implementation, coordination, and documentation of LEED credit requirements. Construction manager and trade constructors LEED representative(s) shall attend LEED certification meetings and shall be present on site at all times when work is in progress.
- B. The construction manager shall keep at least one copy of the LEED for commercial interiors reference guide version 4 (v4) and LEED letter templates at the project site at all times.
- C. In accordance with construction and LEED schedule, necessary documentation and administration should be completed and submitted to LEED consultant on a weekly basis.

#### 1.3 Definitions

- A. Agrifiber Products: Composite panel products derived from agricultural fiber.
- B. Bio-based material: Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material. Products meeting bio-based materials criteria are valued at 100% of their cost for the purposes of credit achievement calculation.
- C. Certificates of chain-of-custody: Certificates signed by manufacturers certifying that wood used to make products was obtained from forests certified by an FSC-certification body to comply with FSC 1.2, "principles and criteria." Certifications shall include evidence that mill is certified for chain-of-custody by an FSC accredited certification body.
- D. Chain of custody: a procedure that tracks a product from the point of harvest or extraction to its end use, including all successive stages of processing, transformation, manufacturing, and

distribution.

- E. Commissioning: The process of verifying and documenting that a building and all of its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements.
- F. Composite Wood: A product consisting of wood fiber or other plant particles bonded together by a resin or binder.
- G. Cradle-to-Cradle certification: Certification which verifies product recyclability and safety for human and environmental health, product ingredient toxicity, and continuous product design and manufacturing optimization.
- H. Cradle-to-gate assessment: Analysis of a product's partial lifecycle, from resource extraction (cradle) to the factory gate (before it is transported for distribution and sale). It omits use and disposal phases of the product.
- I. Environmental product declaration: A statement that the item meets the environmental requirements of ISO 14021-1999, ISO 14025-2006 and EN 15804, or ISO 21930-2007.
- J. Extended producer responsibility: Measures undertaken by the maker of a product to accept its own and sometimes other manufacturers' products as postconsumer waste at the end of the products' useful life and recycle them into new products. A program must be widely available. For Carpet, extended producer responsibility must be consistent with NSF/ANSI 140-2007.
- K. FloorScore: Indoor air quality certification standard for hard surface flooring materials, adhesives, and underlayments. Developed by the Resilient Floor Covering Institute with SCS. SCS is the exclusive certification body for the FloorScore program.
- L. FSC: Forest Stewardship Council
- M. GREENGUARD Gold Certification: Indoor air quality certification standard for low-emitting products. Formerly known as GREENGUARD Children & Schools Certification.
- N. General Emissions Criteria: CDPH Standard Method v1.1: California Department of Public Health (CDPH) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, v. 1.1–2010, for the emissions testing and requirements of products and materials.
- O. GRI: Global Reporting Initiative
- P. Health Product Declaration: A statement of each intentional ingredient and known residual of a material. Met by full disclosure of intentional ingredient requirements, Known Hazards requirements, or the role of the ingredient with explanation.
- Q. IAQ: Indoor Air Quality. See SMACNA guidelines for strategies to maintain good indoor air quality.
- R. LEED: Leadership in energy & environmental design
- S. Life-cycle assessment: An evaluation of the environmental effects of a product cradle-to-grave, as defined by ISO 14040-2006 and ISO 14044-2006.
- T. Material stream: Waste materials types, as sorted by the waste hauler for recycling. Examples

include, but are not limited to: plastic, carpet, paper/cardboard, clean wood, metal, sheetrock, brick/Concrete masonry, asphalt shingles.

- U. NAUF/NAF: No added urea-formaldehyde and no added formaldehyde.
- V. Post-consumer material: Waste material, generated by households or by commercial, industrial and institutional and institutional facilities in their role as end-users of the product, which no longer can be used for its intended purpose.
- W. Pre-consumer material: Material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.
- X. Rapidly Renewable Materials: Materials made from plants that are typically harvested within a 10year or shorter cycle. Rapidly renewable materials include products made from bamboo, cotton, flax, jute, straw, sunflower seed hulls, vegetable oils, or wool.
- Y. Recycled Content: The percentage by weight of constituents that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer).
- Z. Regional Materials: Materials that are extracted, harvested, recovered, and manufactured within a radius of 100 miles from the Project site.
- AA. SCS IAQ Gold Certification: Indoor air quality certification standard for furniture and building materials. Standard aligns with both ANSI/BIFMA M7.1 and X7.1, as well as CA 01350. Developed and administered by SCS Global Services.
- BB. SMACNA: Sheet Metal and Air Conditioning Contractor's National Association
- CC. WaterSense: U.S. Environmental Protection Agency's independent product labelling program which certifies high-performing, water-efficient water fixtures.
- DD. VOC (Volatile Organic Compound): Carbon compounds that participate in atmospheric photochemical reactions (excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, and ammonium carbonate). The compounds vaporize (become gas) at normal room temperatures.

#### **1.4 Submittals**

- A. All LEED submittals shall be in electronic format and sent directly to the LEED Project Manager. Submittals shall include the LEEDv4 product data submittal reporting form, product cutsheets and/or MSDS sheets verifying claims made on the LEED reporting form, and material cost.
- B. LEED submittals are in addition to other submittals. If submitted item is identical to that submitted to comply with other requirements, submit duplicate copies as a separate submittal to verify compliance with LEED requirements.
- C. All LEED submittals and documentation shall be presented in a tabulated format and conform to the LEED for commercial interiors version 4 (v4) online sample credit templates.
- D. Contractor shall be responsible for completion of construction related LEED-Online credit forms and will be provided with access to the project's LEED-Online account.

- E. When documentation to show compliance with a LEED prerequisite or credit, manufacturer literature (such as cut sheets, print outs or MSDS sheets) or statements to be on manufacturers letterhead certifying the stated product attribute must be submitted.
- F. Project materials cost data: Provide statement indicating total General Contractor cost for each building material/product used for project. Include statement indicating total cost of mechanical and electrical components.
- G. Retain original invoices for: lumber, wood veneers, plywood and waste haul tickets in the case of a LEED audit by the USGBC. These original documents may be requested as supplemental documentation.

## **Part 2: Execution**

### 2.1 LEED Action Plan

- A. LEED action plan: construction manager is responsible for implementation, coordination and documentation of the LEED credit requirements indicated below. LEED Project Manager will provide credit templates for submission to the construction manager. Provide preliminary submittals or plans within 14 days of date established for commencement of the work, indicating how the following requirements will be met. Provide final submittals documenting compliance with the LEED credit requirements indicated below:
  - 1. WE Indoor Water Use Reduction prerequisite.
    - a. The contractor will ensure that all newly purchased water closets, urinals, and showerheads are EPA WaterSense labeled.
    - b. All newly-purchased dishwashers and ice machines are EPA ENERGY STAR labeled
  - 2. EA Fundamental Commissioning and Verification prerequisite 1. GC will coordinate the fundamental commissioning of the building energy systems by the MEP engineer: coordinate the commissioning process with commissioning authority, and ensure that commissioning activities are being scheduled into the master schedule. Conform to the requirements of the commissioning specifications and commissioning plan. Refer to commissioning specifications in MEP drawings.
  - 3. EA Minimum/Optimize Energy Performance prerequisite and credit: 90% (by rated power) of new appliances and equipment brought onto the project will be ENERGY STAR labeled.
  - 4. MR Building Product Disclosure and Optimization—Environmental Product Declarations credit: Specify permanently installed products with publicly released environmental product declarations wherever possible. GC to ensure that at least 20 different products sourced from at least 5 different manufacturers are selected according to the below product calculations.
    - i. Materials with product-specific life-cycle assessment Declaration conforming to ISO 14044 (includes minimum cradle-to-gate scope) valued as one-fourth of a product.
    - ii. Materials with industry-wide (generic) type III Environmental Product Declaration are valued as one-half of a product.
    - iii. Materials with product-specific type III Environmental Product Declaration are valued as one whole product.
  - 5. MR Building Product Disclosure and Optimization—Sourcing of Raw Materials credit:



Specify permanently installed products with publicly released environmental product declarations from raw material extraction wherever possible. GC to ensure that at least 20 different products sourced from at least 5 different manufacturers are selected according to the below product calculations.

- i. Materials with self-declared manufacturer reports are valued as one-half of a product.
  - ii. Materials using GRI, OECD, U.N. Global Compact, or ISO 26000 third-party verified reports are valued as one whole product.
6. MR Building Product Disclosure and Optimization—Material Ingredients credit: Specify permanently installed products with published manufacturer inventories of chemicals, Health Product Declarations, or Cradle to Cradle v2 basic or v3 bronze certification wherever possible. GC to ensure that at least 20 different products sourced from at least 5 different manufacturers are selected.
7. MR Construction and Demolition Waste Management credit: Construction waste management (divert 75% of at least 4 material streams from disposal): Waste management plan to comply with the code consultant’s requirements and should be coordinated directly between the contractor and the green consultant. A sample waste management plan will be provided to be used as a reference in creating a custom plan for the project to ensure a 75% diversion rate from 4 material streams.
8. EQ Low-Emitting Materials credit: Provide product data for interior and exterior adhesives/sealants, flooring, composite wood, ceiling and wall systems, and furniture indicating the actual VOC content of each product used. Products shall comply with all the following emissions and content standards, as applicable:
  - i. All building products will be tested and determined compliant with the California Department of Public Health Standard Method v1.1-2010 emissions testing, and state the range of total VOCs after 14 days.
  - ii. At least 90% of interior adhesives and sealants applied on-site, by volume, must meet South Coast Air Quality Management District (SCAQMD) Rule# 1113 VOC limits:
    - a. Bond Breakers: 350 g/L
    - b. Building Envelope Coating: 100 g/L
    - c. Concrete-Curing Compounds: 100 g/L
    - d. Concrete Surface Retarder: 50 g/L
    - e. Default: 50 g/L
    - f. Driveway Sealer 50 g/L
    - g. Dry-Fog Coatings: 50g/L
    - h. Faux Finishing Coatings
      - a) Clear topcoat: 100 g/L
      - b) Decorative Coatings: 350 g/L
      - c) Glazes: 350 g/L
      - d) Japan: 350 g/L
      - e) Trowel Applied Coatings: 50 g/L
    - i. Fire-Proofing Coatings: 150 g/L



- j. Flats: 50 g/L
  - k. Floor Coatings: 50 g/L
  - l. Form Release Compound: 100 g/L
  - m. Graphic Arts (Sign) Coatings: 150 g/L
  - n. Industrial Maintenance Coatings: 100 g/L
    - a) Color Indicating Safety Coatings: 480 g/L
    - b) High Temperature Coatings: 420 g/L
    - c) Non-Sacrificial Anti-Graffiti Coatings: 100 g/L
    - d) Zinc-Rich IM Primers: 100 g/L
  - o. Magnesite Cement Coatings: 450 g/L
  - p. Mastic Coatings: 100 g/L
  - q. Metallic Pigmented Coatings: 150 g/L
  - r. Multi-Color Coatings: 250 g/L
  - s. Nonflat Coatings: 50 g/L
  - t. Pre-Treatment Wash Primers: 420 g/L
  - u. Primers, Sealers, and Undercoaters: 100 g/L
  - v. Reactive Penetrating Sealers: 350 g/L
  - w. Recycled Coatings: 250 g/L
  - x. Roof Coatings: 50 g/L
    - a) Roof Coatings, Aluminum: 100 g/L
  - y. Rust Preventative Coatings: 100 g/L
  - z. Sacrificial Anti-Graffiti Coatings: 50 g/L
  - aa. Shellac
    - a) Clear: 730 g/L
    - b) Pigmented: 550 g/L
  - bb. Specialty Primers: 100 g/L
  - cc. Stains: 100 g/L
    - c) Stains, Interior: 250 g/L
  - dd. Stone Consolidants: 450 g/L
  - ee. Tile and Stone Sealers: 100 g/L
  - ff. Tub and Tile Refinishing Coatings: 420 g/L
  - gg. Waterproofing Sealers: 100 g/L
  - hh. Waterproofing Concrete/Masonry Sealers: 100 g/L
  - ii. Wood Coatings: 275 g/L
  - jj. Wood Conditioners: 100 g/L
  - kk. Wood Preservatives: 350 g/L
- iii. At least 90% of all interior paints and coating applied on-site, by volume, will meet the South Coast Air Quality Management District (scaqmd) Rule# 1168 VOC limits:
- a. Wood Glues: 30 g/L
  - b. Metal to Metal adhesives: 30 g/L
  - c. Adhesives for porous materials (except wood): 50 g/L
  - d. Plastic foam adhesives: 50 g/L
  - e. Fiberglass: 80 g/L
  - f. Subfloor adhesives: 50 g/L

- g. Indoor carpet adhesives: 50 g/L
  - h. Outdoor carpet adhesives: 150 g/L
  - i. Carpet pad adhesives: 50 g/L
  - j. Dry wall panel adhesives: 50 g/L
  - k. VCT and asphalt tile adhesives: 50 g/L
  - l. Cove base adhesives: 50 g/L
  - m. Rubber floor adhesives: 60 g/L
  - n. Ceramic Tile adhesives: 65 g/L
  - o. Multipurpose construction adhesive: 70 g/L
  - p. Structural glazing adhesives: 100 g/L
  - q. Wood flooring adhesives: 100 g/L
  - r. Contact adhesive: 80 g/L
  - s. Special purpose contact adhesive: 250 g/l
  - t. Plastic cement welding compounds: 250 g/L
  - u. ABS Welding Compounds: 325 g/L
  - v. CPVC Welding compounds: 490 g/L
  - w. PVC welding adhesive: 510 g/L
  - x. Adhesive primer for plastic: 550 g/L
  - y. Structural wood member adhesive: 140 g/L
  - z. Sheet applied rubber lining operations: 850 g/L
  - aa. Top and trim adhesives: 250 g/L
  - bb. Architectural sealants: 250 g/L
  - cc. Sealant primers for nonporous substrates: 250 g/L
  - dd. Sealant primers for porous substrates: 775 g/L
  - ee. Aerosol adhesives green seal standard for commercial adhesives GS-36 requirements.
  - ff. General purpose mist spray: 65% VOCs by weight
  - gg. General purpose web spray: 55% VOCs by weight
  - hh. Special Purpose aerosol adhesives (all types): 70% VOCs by weight
- iv. All (100%) of composite wood must meet requirements of California Air Resources Board, Airborne Toxic Measure to Reduce Formaldehyde Emissions from Composite Wood Products Regulation for ultra-low-emitting formaldehyde resins or no added formaldehyde resins. Select products that state No Added Urea-Formaldehyde (NAUF), No Added Formaldehyde (NAF), Ultra-Low Emitting Formaldehyde (ULEF), and products compliant with California Air Resources Board (CARB) 93120 Airborne Toxic Control Measure (ATCM) for formaldehyde emissions. (Salvaged and reused architectural millwork more than one year old is considered compliant).
  - v. All furniture systems will meet the applicable open plan, private office, or seating scenario maximum emission factors of ANSI/BIFMA Standard Method M7.1-2011: e3-2011 Furniture Sustainability Standard, Sections 7.6.1 and 7.6.2.
    - a. Workstation systems (open plan or private) office emissions limits:
      - a) TVOCtoluene less than or equal to 0.5 mg/m<sup>3</sup>

- b) Formaldehyde less than or equal to 50 ppb
  - c) Total Aldehydes less than or equal to 100 ppb
  - d) 4-Phenylcyclohexene less than or equal to 0.0065 mg/m<sup>3</sup>
  - b. Seating Office emissions limits:
    - a) TVOCtoluene less than or equal to 0.25 mg/m<sup>3</sup>
    - b) Formaldehyde less than or equal to 25 ppb
    - c) Total Aldehydes less than or equal to 50 ppb
    - d) 4-Phenylcyclohexene less than or equal to 0.00325 mg/m<sup>3</sup>
  - c. Individual furniture components emissions limits (open plan workstations):
    - a) TVOC less than or equal to 345 µg/m<sup>2</sup> hr
    - b) Formaldehyde less than or equal to 42.3 µg/m<sup>2</sup> hr
    - c) Total Aldehyde less than or equal to 2.8 µmol/m<sup>2</sup> hr
    - d) 4-Phenylcyclohexene less than or equal to 4.5 µg/m<sup>2</sup> hr
  - d. Individual furniture components emissions limits (private office workstation):
    - a) TVOC less than or equal to 694 µg/m<sup>2</sup> hr
    - b) Formaldehyde less than or equal to 85.1 µg/m<sup>2</sup> hr
    - c) Total Aldehyde less than or equal to 5.7 µmol/m<sup>2</sup> hr
    - d) 4-Phenylcyclohexene less than or equal to 9.0 µg/m<sup>2</sup> hr
9. EQ Construction Indoor Air Quality Management Plan credit: During construction develop and adhere to indoor air quality (IAQ) management plan for the construction and pre-occupancy phases of the building as follows:
- i. During construction meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) IAQ (IAQ Guidelines for Occupied Buildings under Construction, 2<sup>nd</sup> edition, 2007, ANSI/SMACNA 008-2008, Chapter 3).
  - ii. Protect stored on-site or installed absorptive materials from moisture damage.
  - iii. If permanently installed air handles are used during construction, filtration media with a MERV-8 shall be used at each return air grille. Provide product data for filtration media used during construction.
  - iv. Prohibit the use of tobacco products inside the building and within 25 feet of the building entrance during construction

SUBMITTAL: Provide date-stamped photos showing adherence with the above requirements

**APPENDIX I: SAMPLE LEED CHECKLIST**

 <b>LEED v4 for Interior Design and Construction: Commercial Interiors</b> <b>Project Checklist</b>			
Project Name:		Bloomberg	
Date:		1/2/2018	
<b>Y</b>	<b>?</b>	<b>N</b>	
2			Credit Integrative Process 2
<b>17</b>	<b>0</b>	<b>1</b>	<b>Location and Transportation (LT) 18</b>
-	-	-	Credit 1 LEED for Neighborhood Development Location 18
8			Credit 2 Surrounding Density and Diverse Uses 8
7			Credit 3 Access to Quality Transit 7
		1	Credit 4 Bicycle Facilities 1
2			Credit 5 Reduced Parking Footprint 2
<b>6</b>	<b>3</b>	<b>3</b>	<b>Water Efficiency (WE) 12</b>
Y			Prereq 1 Indoor Water Use Reduction Required
6	3	3	Credit 1 Indoor Water Use Reduction 12
<b>8</b>	<b>24</b>	<b>6</b>	<b>Energy and Atmosphere (EA) 38</b>
Y			Prereq 1 Fundamental Commissioning and Verification Required
Y			Prereq 2 Minimum Energy Performance Required
Y			Prereq 3 Fundamental Refrigerant Management Required
	4	1	Credit 1 Enhanced Commissioning 5
8	12	5	Credit 2 Optimize Energy Performance 25
	2		Credit 3 Advanced Energy Metering 2
	3		Credit 4 Renewable Energy Production 3
	1		Credit 5 Enhanced Refrigerant Management 1
	2		Credit 6 Green Power and Carbon Offsets 2
<b>3</b>	<b>3</b>	<b>7</b>	<b>Materials and Resources (MR) 13</b>
Y			Prereq 1 Storage and Collection of Recyclables Required
Y			Prereq 2 Construction and Demolition Waste Management Planning Required
1			Credit 1 Long-Term Commitment 1
		4	Credit 2 Interiors Life-Cycle Impact Reduction 4
	1	1	Credit 3 Building Product Disclosure and Optimization - Environmental Product Declarations 2
	1	1	Credit 4 Building Product Disclosure and Optimization - Sourcing of Raw Materials 2
	1	1	Credit 5 Building Product Disclosure and Optimization - Material Ingredients 2
2			Credit 6 Construction and Demolition Waste Management 2
<b>2</b>	<b>13</b>	<b>2</b>	<b>Indoor Environmental Quality (IEQ) 17</b>
Y			Prereq 1 Minimum Indoor Air Quality Performance Required
Y			Prereq 2 Environmental Tobacco Smoke Control Required
	2		Credit 1 Enhanced Indoor Air Quality Strategies 2
1	2		Credit 2 Low-Emitting Materials 3
1			Credit 3 Construction Indoor Air Quality Management Plan 1
	2		Credit 4 Indoor Air Quality Assessment 2
		1	Credit 5 Thermal Comfort 1
	1	1	Credit 6 Interior Lighting 2
	3		Credit 7 Daylight 3
	1		Credit 8 Quality Views 1
	2		Credit 9 Acoustic Performance 2
<b>4</b>	<b>2</b>	<b>0</b>	<b>Innovation in Design (ID) 6</b>
1			Credit 1 Innovation: Green Education 1
1			Credit 2 Innovation: Low-Mercury Lamp Purchasing 1
1			Credit 3 Innovation: Green Cleaning 1
	1		Credit 4 Innovation: TBD 1
	1		Credit 5 Innovation: TBD 1
1			Credit LEED Accredited Professional 1
<b>0</b>	<b>2</b>	<b>2</b>	<b>Regional Priority (RP) 4</b>
		1	Credit 1 Regional Priority: WEc1 1
		1	Credit 2 Regional Priority: EAc1 [Opt 2] / EAc2 [14 pts] 1
	1		Credit 3 Regional Priority: EQc1 [Opt 1+2] 1
	1		Credit 4 Regional Priority: MRc2 / MRc3 1
<b>42</b>	<b>47</b>	<b>21</b>	<b>TOTALS Possible Points: 110</b>
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80+			