# Sustainable purchasing

MR1 | Possible point

Glossary

## Intent

To reduce the environmental harm from materials purchased, used, and disposed of in the operations within buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

To reduce the environmental harm from materials purchased, used, and disposed of in the operations within buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the upgrade of buildings.

To establish and maintain a toxic material source reduction program to reduce the amount of mercury brought onto the building site through purchases of lamps.

To reduce the environmental and transportation impacts associated with food production and distribution.

To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the upgrade of buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

To reduce the environmental and transportation impacts associated with food production and distribution.

To reduce the environmental harm from materials purchased, used, and disposed of in the operations within buildings.

To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

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To reduce the environmental and air quality impacts of the materials acquired for use in the operations and maintenance of buildings.

To reduce environmental harm from materials used in the operations and maintenance of buildings.

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To reduce environmental harm from materials used in the operations and maintenance of buildings.

To establish and maintain a toxic material source reduction program to reduce the amount of mercury brought onto the building site through purchases of lamps.

To establish and maintain a toxic material source reduction program to reduce the amount of mercury brought onto the building site through purchases of lamps.

To reduce the environmental harm from materials used in building renovations.

## Requirements

**Establishment**

**Environmentally preferable purchasing**

Have in place an environmentally preferable purchasing (EPP) policy for products purchased during regular operations of the building. Include at a minimum:

- Ongoing Purchases
  - The five most purchased product categories based on total annual purchases.
  - Paper, toner cartridges, binders, batteries, and desk accessories.
  - Lamps (indoor and outdoor, hard-wired and portable fixtures)
  - Food (required for EBOM Schools and Hospitality only)
- Durable Goods Purchases
  - Office equipment, appliances, and audiovisual equipment

- Electric powered equipment

The policy should address the criteria in the following credits:

- Materials and Resources Credit: Purchasing—Ongoing
- Materials and Resources Credit: Purchasing—Lamps

The policy must cover at least those product purchases within the building and site management's control.

**Solid Waste Management**

Establish storage locations for recyclable materials, including mixed paper, corrugated cardboard, glass, plastics, and metals. Establish safe storage areas for batteries and mercury-containing lamps.

Have in place an environmentally preferable solid waste management policy that addresses reuse, recycling, or composting of products purchased during regular operations of the building. Include at a minimum:

- Ongoing waste
  - The five most purchased product categories based on total annual purchases.
  - Food (required for EBOM Schools and Hospitality only)
- Durable goods waste
  - Office equipment, appliances, and audiovisual equipment
  - Electric powered equipment
- Hazardous Waste
  - Safe disposal of batteries and lamps (indoor and outdoor, hard-wired and portable fixtures)

The policy must cover at least those product purchases within the building and site management's control.

**Performance**

Maintain a high-performing solid waste management program by conducting a waste stream audit of ongoing consumables at least once every five years or by diverting 75% of ongoing waste and achieving Materials and Resources Credit Solid Waste Management—Ongoing.

In addition to the requirements above, retail projects should promote environmentally responsible sourcing of retail merchandise through one of the four following options.

**Option 1. supply chain survey**

Establish a supply chain survey.

The survey should collect information from each supplier regarding the following:

- social equity practices;
- energy and carbon reduction measures;
- material selection practices for products, packaging, and distribution;
- waste reduction and waste management measures; and
- human health protection measures.

**Option 2. supply chain education program for retail employees and/or retail tenant representatives**

Establish a program to inform employees and tenants engaged in merchandise purchasing, packaging, and distribution about environmentally preferable supply chain strategies.

Include the following in the education program:

- environmental best practices for supply chain decisions;
- resources for additional information; and
- internal contacts for more information.

**Option 3. supply chain environmental criteria list**

Establish criteria for retail products encouraging an environmentally preferable supply chain strategy addressing the following areas:

- purchasing;
- materials handling and packaging;
- inventory;
- materials recovery during manufacturing;
- waste disposal; and
- product take-back.

**Option 4. sustainable purchasing education for customers**

Install an educational program display for customers displaying environmental initiatives that the store has implemented. The educational display should incorporate information that includes the supply chain environmental criteria listed in Option 3.

Maintain a sustainable purchasing program covering materials with a low cost per unit that are regularly used and replaced through the course of business. These materials include at a minimum, paper (printing or copy paper, notebooks, notepads, envelopes), toner cartridges, binders, batteries and desk accessories. Food and beverages are excluded from this credit but are covered under MR Credit 5. Sustainable Purchasing - Food. For materials that may be considered either ongoing consumables or durable goods (see MR Credits 2.1 and 2.2), the project team is free to decide which category to put them in as long as consistency is maintained with MR Credits 2.1 and 2.2, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 7.

A template calculator for MR c1 is available in LEED Online 3 as a credit submittal.

One point is awarded to projects that achieve sustainable purchases of at least 60%, of total purchases (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 50% rapidly renewable materials.
- Purchases contain at least 50% materials harvested and processed or extracted and processed within a 500 mile (800 kilometer) radius of the project. Building materials or products shipped by rail or water have been extracted, harvested or recovered, as well as manufactured within a 500 mile (800 kilometer) total travel distance of the project site using a weighted average determined through the following formula:
  (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) ≤ 500 miles [800 kilometers]
- Purchases consist of at least 50% Forest Stewardship Council (FSC)–certified paper products.
- Batteries are rechargeable.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Ongoing consumables must be purchased during the performance period to earn points in this credit.

**Credit substitution available**
You may use the LEED v4 version of this credit on v2009 projects. For more information check out this article.

Maintain a sustainable purchasing program covering items available at a higher cost per unit and durable goods that are replaced infrequently and/or may require capital program outlays to purchase. Materials that may be considered either ongoing consumables (see MR Credit 1:Sustainable Purchasing—Ongoing Consumables) or durable goods, can be counted under either category provided consistency is maintained with MR Credit 1, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 8: Solid Waste Management—Durable Goods.

**MR credit 2.1 - electric-powered equipment**

Achieve sustainable purchases of at least 40% of total purchases of electric-powered equipment (by cost) during the performance period. Examples of electric-powered equipment include, but are not limited to, office equipment (computers, monitors, copiers, printers, scanners, fax machines), appliances (refrigerators, dishwashers, water coolers), external power adapters, and televisions and other audiovisual equipment. Sustainable purchases are those that meet one of the following criteria:

- The equipment is ENERGY STAR® qualified (for product categories with developed specifications)
- The equipment (either battery or corded) replaces conventional gas-powered equipment[1].
- Projects outside the U.S. may demonstrate the equipment is equal to or more stringent than ENERGY STAR® qualified through use of local equivalencies. [Europe ACP: ENERGY STAR Equivalent].

### Alternative Compliance Paths (ACPs)

**Europe ACP: ENERGY STAR Equivalent**

Projects in Europe may use the following approved standards in place of ENERGY STAR:

- EU Energy Star
- TCO
- Blue Angel

**LEED EBOM 2009 reference guide supplement with Europe ACPs (Global ACP)**

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Maintain a sustainable purchasing program covering materials for facility renovations, demolitions, refits and new construction additions. This applies only to base building elements[1] permanently or semipermanently attached to the building itself. Materials considered furniture, fixtures and equipment (FF&E) are not considered base building elements and are excluded from this credit. Mechanical, electrical and plumbing components and specialty items such as elevators are also excluded from this credit.

A sample calculaton for this credit is available in the LEED Reference Guide for Green Building Operations & Maintenance, 2009 Edition. Achieve sustainable purchases of 50% of total purchases (by cost) during the performance period. Sustainable purchases shall meet 1 or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 70% material salvaged from off-site or outside the organization.
- Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
- Purchases contain at least 50% rapidly renewable material.
- Purchases contain at least 50% Forest Stewardship Council certified wood.
- Purchases contain at least 50% material harvested and processed or extracted and processed within a 500 mile (800 kilometer) radius of the project. Building materials or products shipped by rail or water have been extracted, harvested or recovered, as well as manufactured within a 500 mile (800 kilometer) total travel distance of the project site using a weighted average determined through the following formula:
  (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) ≤ 500 miles [800 kilometers]
- Adhesives and sealants have a VOC content less than the current VOC content limits of South

Coast Air Quality Management District (SCAQMD) Rule #1168, or sealants used as fillers meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.

- Paints and coating have VOC emissions not exceeding the VOC and chemical component limits of Green Seal's Standard GS-11 requirements.
- Noncarpet finished flooring meets one of the following requirements and constitutes a minimum of 25% of the finished floor area:
  - Is FloorScore certified
  - Maximum VOC concentrations are less than or equal to those specified in the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda, using the office scenario as defined in Table 7.5 within the practice.
  - Maximum VOC concentrations meet the California requirements specified above based on the following:
    - California Department of Public Health (CDPH) Standard Method V1.1-2010 using test results obtained at the 14 day time point
    - Projects outside the U.S. may use the German AgBB/DIBt testing method and all testing methods based on AgBB/DIBt method (GUT, EMICODE, Blue Angel) using test results obtained at the 3 day or 7 day or 14 day time point. For caprolactam, if test results obtained at the 3 day or 7 day time point is used, the emission concentration must be less than ½ of the concentration limit specified above because the emission may not have peaked at the measured time points.
      If a European testing method (AgBB/DIBt GUT, EMICODE, Blue Angel) had used parameters for calculating test results different from those specified in the referenced California method, then the European test results for carpets or floorings need to be converted into California air concentrations by multiplication with 0.7.
- Carpet meets one of the following requirements:
  - Meets CRI Green Label Plus Carpet Testing Program
  - Maximum VOC concentrations are less than or equal to those specified in the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda, using the office scenario as defined in Table 7.5 within the practice. The additional VOC concentration limits listed in Section 9.1a must also be met
  - Maximum VOC concentrations meet the California requirements specified above based on the following:
    - California Department of Public Health (CDPH) Standard Method V1.1-2010 using test results obtained at the 14 day time point
    - Projects outside the U.S. may use the German AgBB/DIBt testing method and all testing methods based on AgBB/DIBt method (GUT, EMICODE, Blue Angel) using test results obtained at the 3 day or 7 day or 14 day time point. For caprolactam, if test result obtained at the 3 day or 7 day time point is used, the emission concentration must be less than ½ of the concentration limit specified above because the emission may not have peaked at the measured time points.
      If a European testing method (AgBB/DIBt GUT, EMICODE, Blue Angel) had used parameters for calculating test results different from those specified in the referenced California method, then the European test results for carpets or floorings need to be converted into California air concentrations by multiplication with 0.7.
- Carpet cushion meets the requirements of the CRI Green Label Testing Program.
- Composite panels and agrifiber2 products contain no added urea-formaldehyde resins.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Materials for alterations or additions must be purchased during the performance period to earn points in this credit.

Develop a lighting purchasing plan that specifies maximum levels of mercury permitted in mercury-containing lamps purchased for the building and associated grounds, including lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The purchasing plan must specify a target for the overall average of mercury content in lamps of 90 picograms per lumen-hour or less. The plan must include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The plan must require that at least 90% of purchased lamps comply with the target (as measured by the number of lamps). Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts.

Implement the lighting purchasing plan during the performance period such that all purchased mercury-containing lamps comply with the plan. One point is awarded to projects for which at least 90% of all mercury-containing lamps purchased during the performance period (as measured by the number of lamps) comply with the purchasing plan and meet the following overall target for mercury content of 90 picograms per lumen-hour.

Exception: Screw-based, integral compact fluorescent lamps (CFLs) may be excluded from both the plan and the performance calculation if they comply with the voluntary industry guidelines for maximum mercury content published by the National Electrical Manufacturers Association (NEMA), as described in the LEED Reference Guide for Green Building Operations & Maintenance, 2009 Edition. [Europe ACP: NEMA Equivalent]

Screw-based, integral CFLs that do not comply with the NEMA guidelines [Europe ACP: NEMA Equivalent] must be included in the purchasing plan and the performance calculation.

Performance metrics for lamps — including mercury content (mg/lamp), mean light output (lumens) and rated life (hours) — must be derived according to industry standards, as described in the LEED Reference Guide for Green Building Operations

& Maintenance, 2009 Edition. Mercury values generated by toxicity characteristic leaching procedure (TCLP) tests do not provide the required mercury information for LEED 2009 for Existing Buildings: Operations & Maintenance and cannot be used in the calculation.

LEED 2009 for Existing Buildings: Operations & Maintenance addresses only the lamps purchased during the performance period, not the lamps installed in the building. Similarly, LEED 2009 for Existing Buildings: Operations & Maintenance does not require that each purchased lamp comply with the specified mercury limit; only the overall average of purchased lamps must comply.

Mercury-containing lamps (or their high-efficiency counterparts) must be purchased during the performance period to earn points in this credit.

### Alternative Compliance Paths (ACPs)

**Europe ACP: NEMA Equivalent**

Projects in Europe may exclude CFLs if they comply with the criteria listed in Annex III of the Restriction of the Use of Certain Hazardous Substances of the European Union Directive (EU RoHS.)

Screw-based, integral CFLs that do not comply with the NEMA guidelines **(or EU RoHS for projects in Europe)** must be included in the purchasing plan and the performance calculation.

**LEED EBOM 2009 reference guide supplement with Europe ACPs (Global ACP)**

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**Credit substitution available**

You may use the LEED v4 version of this credit on v2009 projects. For more information check out this article.

Achieve sustainable purchases of at least 25% of total combined food and beverage purchases (by cost) during the performance period. Sustainable purchases are those that meet 1 or both of the following criteria:

- Purchases are labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, Marine Stewardship Council's Blue Eco-Label or are labeled with the European Community Organic Production logo in accordance with Regulations (EC) No 834/2007 and (EC) No 889/2008.
- Purchases are produced within a 100-mile (160-kilometer) radius of the site.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that is both USDA Organic and is produced on a farm within 100 miles (160 kilometers) of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Food or beverages must be purchased during the performance period to earn points in this credit.

Maintain a sustainable purchasing program covering materials with a low cost per unit that are regularly used and replaced through the course of business. These materials include, but are not limited to, paper (printing or copy paper, notebooks, notepads, envelopes), toner cartridges, binders, batteries and desk accessories but exclude food and beverages (see MR Credit 5). For materials that may be considered either ongoing consumables or durable goods (see MR Credit 2), the project team is free to decide which category to put them in as long as consistency is maintained with MR Credit 2, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 7.

A template calculator for MR Credits 1.1–1.3 is available in the LEED for Existing Buildings: OPERATIONS & MAINTENANCE Reference Guide. One, two or three points are awarded to projects that achieve sustainable purchases of at least 40%, 60% or 80%, respectively, of total purchases (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 50% rapidly renewable materials.
- Purchases contain at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.
- The purchases consist of at least 50% Forest Stewardship Council (FSC)–certified paper products.
- Batteries are rechargeable.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Ongoing consumables must be purchased during the performance period to earn points in this credit.

Maintain a sustainable purchasing program covering items available at a higher cost per unit and durable goods that are replaced infrequently and/or may require capital program outlays to purchase. Materials that may be considered either ongoing consumables (see MR Credit 1) or durable goods can be counted under either category provided consistency is maintained with MR Credit 1, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 8.

- **MR Credit 2.1:** Electric-Powered Equipment. One point is awarded to projects that achieve sustainable purchases of at least 40% of total purchases of electric-powered equipment (by cost) during the performance period. Examples of electric-powered equipment include, but are not limited to, office equipment (computers, monitors, copiers, printers, scanners, fax machines), appliances (refrigerators, dishwashers, water coolers), external power adapters, and televisions and other audiovisual equipment. Sustainable purchases are those that meet one of the following criteria:

- The equipment is ENERGY STAR labeled (for product categories with developed specifications).
- The equipment (either battery or corded) replaces conventional gas-powered equipment. Examples include, but are not limited to, maintenance equipment and vehicles, landscaping equipment and cleaning equipment.

- **MR Credit 2.2:** Furniture. One point is awarded to projects that achieve sustainable purchases of at least 40% of total purchases of furniture (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

  - Purchases contain at least 10% post-consumer and/or 20% post-industrial material.
  - Purchases contain at least 70% material salvaged from off-site or outside the organization.
  - Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
  - Purchases contain at least 50% rapidly renewable material.
  - Purchases contain at least 50% Forest Stewardship Council (FSC)–certified wood.
  - Purchases contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project.

Each furniture purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Durable goods must be purchased during the performance period to earn points in this credit.

Maintain a sustainable purchasing program covering materials for facility renovations, demolitions, refits and new construction additions. This applies only to base building elements permanently or semipermanently attached to the building itself. Examples include, but are not limited to, building components and structures (wall studs, insulation, doors, windows), panels, attached finishings (drywall, trim, ceiling panels), carpet and other flooring material, adhesives, sealants, paints and coatings. Materials considered furniture, fixtures and equipment (FF&E) are not considered base building elements and are excluded from this credit. Mechanical, electrical and plumbing components and specialty items such as elevators are also excluded from this credit.

A template calculator for MR Credit 3 is available in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. One point is awarded to projects that achieve sustainable purchases of 50% of total purchases (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 70% material salvaged from off-site or outside the organization.
- Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
- Purchases contain at least 50% rapidly renewable material.
- Purchases contain at least 50% Forest Stewardship Council (FSC)–certified wood.
- Purchases contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project.
- Adhesives and sealants have a VOC content less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, or sealants used as fillers meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.
- Paints and coating have VOC emissions not exceeding the VOC and chemical component limits of Green Seal's Standard GS-11 requirements.
- Noncarpet finished flooring is FloorScore-certified and constitutes a minimum of 25% of the finished floor area.
- Carpet meets the requirements of the CRI Green Label Plus Carpet Testing Program.
- Carpet cushion meets the requirements of the CRI Green Label Testing Program.
- Composite panels and agrifiber products contain no added urea-formaldehyde resins.

*Composite wood and agrifiber products* are defined as particleboard, medium-density fiberboard (MDF), plywood, oriented-strand board (OSB), wheatboard, strawboard, panel substrates and door cores.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Materials for alterations or additions must be purchased during the performance period to earn points in this credit.

Develop a lighting purchasing plan that specifies maximum levels of mercury permitted in mercury-containing lamps purchased for the building and associated grounds, including lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The purchasing plan must specify a target for the overall average of mercury content in lamps of 90 picograms per lumen-hour or less. The plan must include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The plan must require that at least 90% of purchased lamps comply with the target (as measured by the number of lamps). Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts.

Implement the lighting purchasing plan during the performance period such that all purchased mercury-containing lamps comply with the plan. One or two points are awarded to projects for which at least 90% of all mercury-containing lamps purchased during the performance period (as measured by the number of lamps) comply with the purchasing plan and meet the following overall targets for mercury content:

- **MR Credit 4.1** (1 point): 90 picograms per lumen-hour
- **MR Credit 4.2** (2 points): 70 picograms per lumen-hour

A template calculator to aid in documenting performance for MR Credits 4.1 and 4.2 is

available in the LEED for Existing Buildings: Operations & Maintenance Reference Guide.

Exception: Screw-based, integral compact fluorescent lamps (CFLs) may be excluded from both the plan and the performance calculation if they comply with the voluntary industry guidelines for maximum mercury content published by the National Electrical Manufacturers Association (NEMA), as described in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. Screw-based, integral CFLs that do not comply with the NEMA guidelines must be included in the purchasing plan and the performance calculation.

Performance metrics for lamps—including mercury content (mg/lamp), mean light output (lumens) and rated life (hours)—must be derived according to industry standards, as described in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. Mercury values generated by toxicity characteristic leaching procedure (TCLP) tests do not provide the required mercury information for LEED for Existing Buildings: O&M and cannot be used in the calculation.

LEED for Existing Buildings: O&M addresses only the lamps purchased during the performance period, not the lamps installed in the building. Similarly, LEED for Existing Buildings: O&M does not require that each purchased lamp comply with the specified mercury limit; only the overall average of purchased lamps must comply.

Mercury-containing lamps (or their high-efficiency counterparts) must be purchased during the performance period to earn points in this credit.

Achieve sustainable purchases of at least 25% of total combined food and beverage purchases (by cost) during the performance period. Sustainable purchases are those that meet one or both of the following criteria:

- Purchases are labeled USDA Certified Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade or Marine Stewardship Council's Blue Eco-Label.
- Purchases are produced within a 100-mile radius of the site.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that is both USDA Certified Organic and is produced on a farm within 100 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Food or beverages must be purchased during the performance period to earn points in this credit.

**MR credit 2.2 - furniture**

Achieve sustainable purchases of at least 40% of total purchases of furniture (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 70% material salvaged from off-site or outside the organization.
- Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
- Purchases contain at least 50% rapidly renewable material.
- Purchases contain at least 50% Forest Stewardship Council (FSC)-certified wood.
- Purchases contain at least 50% material harvested and processed or extracted and processed within a 500 mile (800 kilometer) radius of the project. Building materials or products shipped by rail or water have been extracted, harvested or recovered, as well as manufactured within a 500 mile (800 kilometer) total travel distance of the project site using a weighted average determined through the following formula:
  (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) ≤ 500 miles [800 kilometers].

Each furniture purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles (800 kilometers) of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Durable goods must be purchased during the performance period to earn points in this credit.

Maintain a sustainable purchasing program covering materials with a low cost per unit that are regularly used and replaced through the course of business. These materials include, but are not limited to, paper (printing or copy paper, notebooks, notepads, envelopes), toner cartridges, binders, batteries and desk accessories but exclude food and beverages (see MR Credit 5). For materials that may be considered either ongoing consumables or durable goods (see MR Credit 2), the project team is free to decide which category to put them in as long as consistency is maintained with MR Credit 2, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 7.

A template calculator for MR Credits 1.1–1.3 is available in the LEED for Existing Buildings: OPERATIONS & MAINTENANCE Reference Guide. One, two or three points are awarded to projects that achieve sustainable purchases of at least 40%, 60% or 80%, respectively, of total purchases (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 50% rapidly renewable materials.
- Purchases contain at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.
- The purchases consist of at least 50% Forest Stewardship Council (FSC)–certified paper products.
- Batteries are rechargeable.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Ongoing consumables must be purchased during the performance period to earn

points in this credit.

Maintain a sustainable purchasing program covering materials with a low cost per unit that are regularly used and replaced through the course of business. These materials include, but are not limited to, paper (printing or copy paper, notebooks, notepads, envelopes), toner cartridges, binders, batteries and desk accessories but exclude food and beverages (see MR Credit 5). For materials that may be considered either ongoing consumables or durable goods (see MR Credit 2), the project team is free to decide which category to put them in as long as consistency is maintained with MR Credit 2, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 7.

A template calculator for MR Credits 1.1–1.3 is available in the LEED for Existing Buildings: OPERATIONS & MAINTENANCE Reference Guide. One, two or three points are awarded to projects that achieve sustainable purchases of at least 40%, 60% or 80%, respectively, of total purchases (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer and/or 20% postindustrial material.
- Purchases contain at least 50% rapidly renewable materials.
- Purchases contain at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.
- The purchases consist of at least 50% Forest Stewardship Council (FSC)–certified paper products.
- Batteries are rechargeable.

Each purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Ongoing consumables must be purchased during the performance period to earn points in this credit.

Maintain a sustainable purchasing program covering items available at a higher cost per unit and durable goods that are replaced infrequently and/or may require capital program outlays to purchase. Materials that may be considered either ongoing consumables (see MR Credit 1) or durable goods can be counted under either category provided consistency is maintained with MR Credit 1, with no contradictions, exclusions or double-counting. Consistency must also be maintained with MR Credit 8.

- **MR Credit 2.1:** Electric-Powered Equipment. One point is awarded to projects that achieve sustainable purchases of at least 40% of total purchases of electric-powered equipment (by cost) during the performance period. Examples of electric-powered equipment include, but are not limited to, office equipment (computers, monitors, copiers, printers, scanners, fax machines), appliances (refrigerators, dishwashers, water coolers), external power adapters, and televisions and other audiovisual equipment. Sustainable purchases are those that meet one of the following criteria:
  - The equipment is ENERGY STAR labeled (for product categories with developed specifications).
  - The equipment (either battery or corded) replaces conventional gas-powered equipment. Examples include, but are not limited to, maintenance equipment and vehicles, landscaping equipment and cleaning equipment.
- **MR Credit 2.2:** Furniture. One point is awarded to projects that achieve sustainable purchases of at least 40% of total purchases of furniture (by cost) during the performance period. Sustainable purchases are those that meet one or more of the following criteria:
  - Purchases contain at least 10% post-consumer and/or 20% post-industrial material.
  - Purchases contain at least 70% material salvaged from off-site or outside the organization.
  - Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
  - Purchases contain at least 50% rapidly renewable material.
  - Purchases contain at least 50% Forest Stewardship Council (FSC)–certified wood.
  - Purchases contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project.

Each furniture purchase can receive credit for each sustainable criterion met (i.e., a $100 purchase that contains both 10% postconsumer recycled content and 50% of content harvested within 500 miles of the project counts twice in the calculation, for a total of $200 of sustainable purchasing).

Durable goods must be purchased during the performance period to earn points in this credit.

Develop a lighting purchasing plan that specifies maximum levels of mercury permitted in mercury-containing lamps purchased for the building and associated grounds, including lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The purchasing plan must specify a target for the overall average of mercury content in lamps of 90 picograms per lumen-hour or less. The plan must include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. The plan must require that at least 90% of purchased lamps comply with the target (as measured by the number of lamps). Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts.

Implement the lighting purchasing plan during the performance period such that all purchased mercury-containing lamps comply with the plan. One or two points are awarded to projects for which at least 90% of all mercury-containing lamps purchased during the performance period (as measured by the number of lamps) comply with the purchasing plan and meet the following overall targets for mercury content:

- **MR Credit 4.1** (1 point): 90 picograms per lumen-hour
- **MR Credit 4.2** (2 points): 70 picograms per lumen-hour

A template calculator to aid in documenting performance for MR Credits 4.1 and 4.2 is available in the LEED for Existing Buildings: Operations & Maintenance Reference Guide.

Exception: Screw-based, integral compact fluorescent lamps (CFLs) may be excluded from both the plan and the performance calculation if they comply with the voluntary industry guidelines for maximum mercury content published by the National Electrical Manufacturers Association (NEMA), as described in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. Screw-based, integral CFLs that do not comply with the NEMA guidelines must be included in the purchasing plan and the performance calculation.

Performance metrics for lamps—including mercury content (mg/lamp), mean light output (lumens) and rated life (hours)—must be derived according to industry standards, as described in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. Mercury values generated by toxicity characteristic leaching procedure (TCLP) tests do not provide the required mercury information for LEED for Existing Buildings: O&M and cannot be used in the calculation.

LEED for Existing Buildings: O&M addresses only the lamps purchased during the performance period, not the lamps installed in the building. Similarly, LEED for Existing Buildings: O&M does not require that each purchased lamp comply with the specified mercury limit; only the overall average of purchased lamps must comply.

Mercury-containing lamps (or their high-efficiency counterparts) must be purchased during the performance period to earn points in this credit.

**Ongoing Consumables**

Purchase at least 60%, by cost, of total ongoing consumables that meet at least one of the following criteria. Include the product categories identified in the Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. Lamps are excluded from the calculation. Each purchase can receive credit for each criterion met.

- Postconsumer recycled content. The content of purchases must meet or exceed the levels listed in the U.S. Environmental Protection Agency Comprehensive Procurement Guidelines. Products not covered by the Guidelines can get credit for their recycled content with no minimum.
- Extended use. Batteries must be rechargeable. Toner cartridges for laser printers must be remanufactured.
- Sustainable agriculture. Food and beverages must be labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, or Marine Stewardship Council's Blue Eco-Label , or labeled with the European Community Organic Production logo in accordance with Regulations (EC) No. 834/2007 and (EC) No. 889/2008.
- Local sourcing of food and beverages. The food or beverage must contain raw materials harvested and produced within 100 miles (160 kilometers) of the site.
- Bio-based materials. 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.
- Paper and wood products. Paper and wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.

**Electric-Powered Equipment**

Purchase at least 40%, by cost, electric-powered equipment that meets at least one of the following criteria. Include product categories specified in Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. In addition, create a phase-out plan to replace remaining products with compliant equipment at the end of their useful life.

- EPEAT rating. The equipment must have a silver Electronic Product Environmental Assessment Tool (EPEAT) rating or better.
- ENERGY STAR rating. If the equipment does not yet fall under the EPEAT rating systems, it must be ENERGY STAR® qualified or performance equivalent for projects outside the U.S.

**Food and Beverages**

Purchase at least 25%, by cost, of total combined food and beverage purchases must meet at least one of the following criteria. Exclude wine, beer, and liquor purchases from the credit calculations.

- Sustainable agriculture. The food or beverage must be labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, or Marine Stewardship Council's Blue Eco-Label, or labeled with the European Community Organic Production logo in accordance with Regulations (EC) No. 834/2007 and (EC) No. 889/2008.
- Local sourcing. The food or beverage must contain raw materials harvested and produced within 100 miles (160 kilometers) of the site.

### Establishment

None.

### Performance

**Ongoing Consumables**

Purchase at least 60%, by cost, of total ongoing consumables that meet at least one of the following criteria. Include the product categories identified in the Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. Lamps are excluded from the calculation. Each purchase can receive credit for each criterion met.

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- Extended use. Batteries must be rechargeable. Toner cartridges for laser printers must be remanufactured.
- Sustainable agriculture. Food and beverages must be labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, or Marine Stewardship Council's Blue Eco-Label , or labeled with the European Community Organic Production logo in accordance with Regulations (EC) No. 834/2007 and (EC) No. 889/2008.
- Local sourcing of food and beverages. The food or beverage must contain raw materials harvested and produced within 100 miles (160 kilometers) of the site.

- Bio-based materials. 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.
- Paper and wood products. Paper and wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.

**Electric-Powered Equipment**

Purchase at least 40%, by cost, electric-powered equipment that meets at least one of the following criteria. Include product categories specified in Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. In addition, create a phase-out plan to replace remaining products with compliant equipment at the end of their useful life.

- EPEAT rating. The equipment must have a silver Electronic Product Environmental Assessment Tool (EPEAT) rating or better.
- ENERGY STAR rating. If the equipment does not yet fall under the EPEAT rating systems, it must be ENERGY STAR® qualified or performance equivalent for projects outside the U.S.

### Establishment

None.

### Performance

**Ongoing Consumables**

Purchase at least 60%, by cost, of total ongoing consumables that meet at least one of the following criteria. Include the product categories identified in the Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. Lamps are excluded from the calculation. Each purchase can receive credit for each criterion met.

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- Extended use. Batteries must be rechargeable. Toner cartridges for laser printers must be remanufactured.
- Sustainable agriculture. Food and beverages must be labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, or Marine Stewardship Council's Blue Eco-Label , or labeled with the European Community Organic Production logo in accordance with Regulations (EC) No. 834/2007 and (EC) No. 889/2008.
- Local sourcing of food and beverages. The food or beverage must contain raw materials harvested and produced within 100 miles (160 kilometers) of the site.
- Bio-based materials. 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.
- Paper and wood products. Paper and wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.

**Electric-Powered Equipment**

Purchase at least 40%, by cost, electric-powered equipment that meets at least one of the following criteria. Include product categories specified in Materials and Resources prerequisite: Ongoing Purchasing and Waste Policy. In addition, create a phase-out plan to replace remaining products with compliant equipment at the end of their useful life.

- EPEAT rating. The equipment must have a silver Electronic Product Environmental Assessment Tool (EPEAT) rating or better.
- ENERGY STAR rating. If the equipment does not yet fall under the EPEAT rating systems, it must be ENERGY STAR® qualified or performance equivalent for projects outside the U.S.

**Food and Beverages**

Purchase at least 25%, by cost, of total combined food and beverage purchases must meet at least one of the following criteria. Exclude wine, beer, and liquor purchases from the credit calculations.

- Sustainable agriculture. The food or beverage must be labeled USDA Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair Trade, or Marine Stewardship Council's Blue Eco-Label, or labeled with the European Community Organic Production logo in accordance with Regulations (EC) No. 834/2007 and (EC) No. 889/2008.
- Local sourcing. The food or beverage must contain raw materials harvested and produced within 100 miles (160 kilometers) of the site.

Implement the lighting purchasing plan that specifies an overall building average of 70 picograms of mercury per lumen-hour or less for all mercury-containing lamps purchased for the building and associated grounds within the project boundary. Include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. Lamps containing no mercury may be counted only if their energy efficiency at least equals that of their mercury-containing counterparts.

### Establishment

None.

### Performance

Implement the lighting purchasing plan that specifies an overall building average of 70 picograms of mercury per lumen-hour or less for all mercury-containing lamps purchased for the building and associated grounds within the project boundary. Include lamps for both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures. Lamps containing no mercury may be counted only if their energy efficiency at least equals that of their mercury-containing counterparts.

**Option 2. furniture (1 point)**

Purchase at least 75%, by cost, of total furniture and furnishings that meet one or

more of the following criteria. Each purchase can receive credit for each criterion met.

- Recycled content. Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost. The recycled content value of an assembly is determined by weight. The recycled fraction is multiplied by the cost of the assembly to determine the recycled cost value.
- Wood products. Wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.
- Bio-based materials. 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.
- Materials reuse. Reuse includes salvaged, refurbished, or reused products.
- Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products valued at 50% of their cost.
- GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards.
  - If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost.
  - If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost.
- Cradle to Cradle Certified. End use products are certified Cradle to Cradle. Products will be valued as follows:
  - Cradle to Cradle v2 Gold: 100% of cost
  - Cradle to Cradle v2 Platinum: 150% of cost
  - Cradle to Cradle v3 Silver: 100% of cost
  - Cradle to Cradle v3 Gold or Platinum: 150% of cost
- International Alternative Compliance Path – REACH Optimization. End use products and materials that do not contain substances that meet REACH criteria for substances of very high concern. If the product contains no ingredients listed on the REACH Authorization or Candidate list, value at 100% of cost.
- Product Manufacturer Supply Chain Optimization. Use building products that:
  - Are sourced from product manufacturers who engage in validated and robust safety, health, hazard, and risk programs which at a minimum document at least 99% (by weight) of the ingredients used to make the building product or building material, and
  - Are sourced from product manufacturers with independent third party verification of their supply chain that at a minimum verifies:
    - Processes are in place to communicate and transparently prioritize chemical ingredients along the supply chain according to available hazard, exposure and use information to identify those that require more detailed evaluation
    - Processes are in place to identify, document, and communicate information on health, safety and environmental characteristics of chemical ingredients
    - Processes are in place to implement measures to manage the health, safety and environmental hazard and risk of chemical ingredients
    - Processes are in place to optimize health, safety and environmental impacts when designing and improving chemical ingredients
    - Processes are in place to communicate, receive and evaluate chemical ingredient safety and stewardship information along the supply chain
    - Safety and stewardship information about the chemical ingredients is publicly available from all points along the supply chain
- Low emissions of volatile organic compounds. Products must have been tested, following ANSI/BIFMA Standard Method M7.1–2011, and must comply with ANSI/BIFMA e3-2011 Furniture Sustainability Standard, Sections 7.6.1 (valued at 50% cost) or 7.6.2 (valued at 100% cost), using either the concentration modeling approach or the emissions factor approach. For classroom furniture, use the standard school classroom model in CDPH Standard Method v1.1. Salvaged and reused furniture more than one year old at the time of use is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- USGBC approved program. Other USGBC approved programs meeting leadership extraction criteria that.

For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

**Option 3. no alterations or furniture purchasing (1 point)**

Make no alterations to the project space and do not purchase any furniture.

### Establishment

None.

### Performance

**Option 1. products and materials (1 point)**

Purchase at least 50%, by cost, of the total maintenance and renovation materials that meet at least one of the following criteria. Include products specified in Materials and Resources prerequisite: Facility Maintenance and Renovation Policy. There is no minimum scope of renovation or new construction work required for eligibility of this credit. Each purchase can receive credit for each criterion met.

- Recycled content. Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content.
- Wood products. Wood products must be certified by the Forest Stewardship Council or USGBC-

approved equivalent.

- Bio-based materials. 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.
- Materials reuse. Reuse includes salvaged, refurbished, or reused products.
- Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products valued at 50% of their cost.
- GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards.
  - If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost.
  - If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost.
- Cradle to Cradle Certified. End use products are certified Cradle to Cradle. Products will be valued as follows:
  - Cradle to Cradle v2 Gold: 100% of cost
  - Cradle to Cradle v2 Platinum: 150% of cost
  - Cradle to Cradle v3 Silver: 100% of cost
  - Cradle to Cradle v3 Gold or Platinum: 150% of cost
- International Alternative Compliance Path – REACH Optimization. End use products and materials that do not contain substances that meet REACH criteria for substances of very high concern. If the product contains no ingredients listed on the REACH Authorization or Candidate list, value at 100% of cost.
- Product Manufacturer Supply Chain Optimization. Use building products that:
  - Are sourced from product manufacturers who engage in validated and robust safety, health, hazard, and risk programs which at a minimum document at least 99% (by weight) of the ingredients used to make the building product or building material, and
  - Are sourced from product manufacturers with independent third party verification of their supply chain that at a minimum verifies:
    - Processes are in place to communicate and transparently prioritize chemical ingredients along the supply chain according to available hazard, exposure and use information to identify those that require more detailed evaluation
    - Processes are in place to identify, document, and communicate information on health, safety and environmental characteristics of chemical ingredients
    - Processes are in place to implement measures to manage the health, safety and environmental hazard and risk of chemical ingredients
    - Processes are in place to optimize health, safety and environmental impacts when designing and improving chemical ingredients
    - Processes are in place to communicate, receive and evaluate chemical ingredient safety and stewardship information along the supply chain
    - Safety and stewardship information about the chemical ingredients is publicly available from all points along the supply chain
- Low emissions of volatile organic compounds. The following products must either be inherently nonemitting or be tested and determined compliant in accordance with California Department of Public Health Standard Method V1.1–2010, using the applicable exposure scenario. The default scenario is the private office scenario; classroom furniture may use the school classroom scenario. Both first-party and third-party statements of product compliance must follow the guidelines in CDPH SM V1.1–2010, Section 8. Organizations that certify manufacturers' claims must be accredited under ISO Guide 65. Laboratories that conduct the tests must be accredited under ISO/IEC 17025 for the test methods they use. Projects outside the United States may use (1) the CDPH standard method or (2) the German AgBB Testing and Evaluation Scheme (2010). Test products either with (1) ISO 16000-3: 2010, ISO 16000-6: 2011, ISO 16000-9: 2006, ISO 16000-11:2006, or (2) the DIBt testing method (2010). U.S. projects must follow the CDPH standard method.
  - thermal and acoustic insulation
  - flooring materials and finishes
  - ceiling materials and finishes
  - wall materials and finishes
- VOC content requirements for wet-applied products. In addition to meeting the general requirements for VOC emissions (above), on-site wet-applied products must not contain excessive levels of VOCs, for the health of the installers and other tradesworkers who are exposed to these products. To demonstrate compliance, a product or layer must meet the following requirements, as applicable. Disclosure of VOC content must be made by the manufacturer. Any testing must follow the test method specified in the applicable regulation.
  - All paints and coatings wet-applied on site must meet the applicable VOC limits of the California Air Resources Board (CARB) 2007, Suggested Control Measure (SCM) for Architectural Coatings, or the South Coast Air Quality Management District (SCAQMD) Rule 1113, effective June 3, 2011.
  - All adhesives and sealants wet-applied on site must meet the applicable chemical content requirements of SCAQMD Rule 1168, July 1, 2005, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168. The provisions of SCAQMD Rule 1168 do not apply to adhesives and sealants subject to state or federal consumer product VOC regulations.
  - For projects outside North America, all paints, coatings, adhesives, and sealants wet-applied on site must either meet the technical requirements of the above regulations, or comply with applicable national VOC control regulations, such as the European Decopaint Directive (2004/42/EC), the Canadian VOC Concentration Limits for Architectural Coatings, or the Hong Kong Air Pollution Control (VOC) Regulation.
  - If the applicable regulation requires subtraction of exempt compounds, any content of intentionally added exempt compounds larger than 1% weight by mass (total exempt

compounds) must be disclosed.
    - If a product cannot reasonably be tested as specified above, testing of VOC content must comply with ASTM D2369-10; ISO 11890, part 1; ASTM D6886-03; or ISO 11890-2.
    - For projects in North America, methylene chloride and perchloroethylene may not be intentionally added in paints, coatings, adhesives, or sealants.
- Low emissions of formadehyde. Built-in cabinetry and architectural millwork containing composite woods must be constructed from materials documented to have low formaldehyde emissions that meet the California Air Resources Board requirements for ultra-low-emitting formaldehyde (ULEF) resins or no-added formaldehyde based resins. Salvaged and reused architectural millwork more than one year old at the time of occupancy is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- USGBC approved program. Other USGBC approved programs meeting leadership extraction criteria.

For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

**AND/OR**

**Option 2. furniture (1 point)**

Purchase at least 75%, by cost, of total furniture and furnishings that meet one or more of the following criteria. Each purchase can receive credit for each criterion met.

- Recycled content. Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost. The recycled content value of an assembly is determined by weight. The recycled fraction is multiplied by the cost of the assembly to determine the recycled cost value.
- Wood products. Wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.
- Bio-based materials. 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.
- Materials reuse. Reuse includes salvaged, refurbished, or reused products.
- Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products valued at 50% of their cost.
- GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards.
    - If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost.
    - If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost.
- Cradle to Cradle Certified. End use products are certified Cradle to Cradle. Products will be valued as follows:
    - Cradle to Cradle v2 Gold: 100% of cost
    - Cradle to Cradle v2 Platinum: 150% of cost
    - Cradle to Cradle v3 Silver: 100% of cost
    - Cradle to Cradle v3 Gold or Platinum: 150% of cost
- International Alternative Compliance Path – REACH Optimization. End use products and materials that do not contain substances that meet REACH criteria for substances of very high concern. If the product contains no ingredients listed on the REACH Authorization or Candidate list, value at 100% of cost.
- Product Manufacturer Supply Chain Optimization. Use building products that:
    - Are sourced from product manufacturers who engage in validated and robust safety, health, hazard, and risk programs which at a minimum document at least 99% (by weight) of the ingredients used to make the building product or building material, and
    - Are sourced from product manufacturers with independent third party verification of their supply chain that at a minimum verifies:
        - Processes are in place to communicate and transparently prioritize chemical ingredients along the supply chain according to available hazard, exposure and use information to identify those that require more detailed evaluation
        - Processes are in place to identify, document, and communicate information on health, safety and environmental characteristics of chemical ingredients
        - Processes are in place to implement measures to manage the health, safety and environmental hazard and risk of chemical ingredients
        - Processes are in place to optimize health, safety and environmental impacts when designing and improving chemical ingredients
        - Processes are in place to communicate, receive and evaluate chemical ingredient safety and stewardship information along the supply chain
        - Safety and stewardship information about the chemical ingredients is publicly available from all points along the supply chain
- Low emissions of volatile organic compounds. Products must have been tested, following ANSI/BIFMA Standard Method M7.1–2011, and must comply with ANSI/BIFMA e3-2011 Furniture Sustainability Standard, Sections 7.6.1 (valued at 50% cost) or 7.6.2 (valued at 100% cost), using either the concentration modeling approach or the emissions factor approach. For classroom furniture, use the standard school classroom model in CDPH Standard Method v1.1. Salvaged and reused furniture more than one year old at the time of use is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- USGBC approved program. Other USGBC approved programs meeting leadership extraction criteria that.

For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

**OR**

**Option 3. no alterations or furniture purchasing (1 point)**

Make no alterations to the project space and do not purchase any furniture.