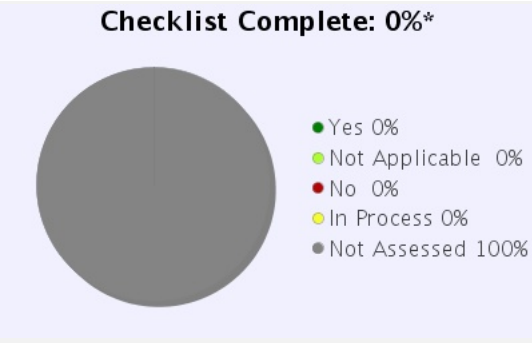
Sustainable Buildings Checklist

The Sustainable Buildings Checklist evaluates sustainability in existing buildings. It was first developed for US federal building managers for compliance with the **Federal Guiding Principles for High Performance Sustainable Buildings** . It is also a valuable tool for evaluating the sustainability of non-government buildings.



Property Name: Administrative Building of America
Agency: Not Applicable
U.S. Federal Real Property Unique Identifier: Not Applicable

Target Date of Compliance:
Actual Date of Compliance:
Checklist Manager:

* Checklist completion percentage includes "Yes" and "Not Applicable" responses.

Status	Guiding Principle
	1. Employ Integrated Assessment, Operation, and Management Principles
	1.1. Team
	1.2. Goals
	1.3. Plan
	1.4. Occupant Feedback
	1.5. Commissioning
	2. Optimize Energy Performance
Not Assessed	2.1. Energy Efficiency
	2.2. Energy Efficient Products
	2.3. Onsite Renewable Energy
	2.4. Measurement and Verification
	2.5. Benchmarking
	3. Protect and Conserve Water
Not Assessed	3.1. Indoor Water
Not Assessed	3.2. Outdoor Water
	3.3. Storm Water
	3.4. Water Efficient Products
	4. Enhance Indoor Environmental Quality
	4.1. Ventilation and Thermal Comfort
	4.2. Moisture Control
	4.3. Automated Lighting Controls
Not Assessed	4.4. Daylighting and Occupant Controls
	4.5. Low-Emitting Materials
	4.6. Integrated Pest Management
	4.7. Tobacco Smoke Control
	5. Reduce Environmental Impact of Materials
	5.1. Recycled Content
	5.2. Biobased Content
	5.3. Environmentally Preferable Products
	5.4. Waste and Materials Management
	5.5. Ozone Depleting Compounds

1. Employ Integrated Assessment, Operation, and Management Principles

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	1.1 Team Use an integrated team to develop and implement policy regarding sustainable operations and maintenance.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Team charter, roster or equivalent ☐ Completed "Responsible Team Member" fields ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	1.2 Goals Establish operational performance goals for energy, water, material use and recycling, and indoor environmental quality, and ensure incorporation of these goals throughout the remaining lifecycle of the building. Incorporate sustainable operations and maintenance practices within the appropriate Environmental Management System (EMS).	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ EMS Manual that incorporates operational performance goals and sustainable operations and maintenance practices ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	1.3 Plan Incorporate a building management plan to ensure that operating decisions and tenant education are carried out with regard to integrated, sustainable building operations and maintenance.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Training schedules ☐ Seminar Agendas/Flyers ☐ Newsletters ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	1.4 Occupant Feedback Augment building operations and maintenance as needed using occupant feedback on work space satisfaction.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Post occupancy survey results ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

✓	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	1.5 Commissioning Assess existing condition and operational procedures of the building and major building systems and identify areas for improvement. Employ recommissioning, tailored to the size and complexity of the building and its system components, in order to optimize and verify performance of fundamental building systems. Commissioning must be performed by an experienced commissioning provider. When building commissioning has been performed, the commissioning report, summary of actions taken, and schedule for recommissioning must be documented. Building recommissioning must have been performed within four years prior to reporting a building as meeting the Guiding Principles. Meet the requirements of EISA 2007, Section 432.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Commissioning report with summary of actions taken and recommissioning schedule ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

2. Optimize Energy Performance

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	2.1. Energy Efficiency Use one or more of the following three options to measure energy efficiency performance.			
	Option #1 - Option 1 Receive an ENERGY STAR® score of 75 or higher.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Current ENERGY STAR Score demonstrates compliance if it is 75 or higher. ☐ ENERGY STAR Certification demonstrates compliance ☐ Other: _____	

	Baseline	Current	Change
Year Ending	N/A	N/A	N/A
ENERGY STAR Score	N/A	N/A	N/A
Source Energy Use (kBtu)	N/A	N/A	N/A
Source EUI (kBtu/ft²)	N/A	N/A	N/A
Site Energy Use (kBtu)	N/A	N/A	N/A
Site EUI (kBtu/ft²)	N/A	N/A	N/A

ENERGY STAR Certification - Last Approval Date: Not Applicable

Notes/Comments:	**Justification (if Not Applicable):**		
Option #2 - Option 2 Reduce measured building energy use by 20% compared to building energy use in 2003 or a year thereafter with quality energy use data	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ The ***Change*** column for ***Site Energy Use*** or ***Site Energy Use - Adjusted to Current Year*** demonstrates compliance if it is a reduction of 20% or greater. ☐ Metered energy consumption reduction calculation ☐ Other: _____	

	Baseline	Current	Change
Year Ending	N/A	N/A	N/A
Site Energy Use (kBtu)	N/A	N/A	N/A
Site EUI (kBtu/ft²)	N/A	N/A	N/A
Site Energy Use - Adjusted to Current Year (kBtu)	N/A	N/A	N/A
Site EUI - Adjusted to Current Year (kBtu/ft²)	N/A	N/A	N/A
Source Energy Use (kBtu)	N/A	N/A	N/A
Source EUI (kBtu/ft²)	N/A	N/A	N/A
Source Energy Use - Adjusted to Current Year (kBtu)	N/A	N/A	N/A
Source EUI - Adjusted to Current Year (kBtu/ft²)	N/A	N/A	N/A

Notes/Comments:	**Justification (if Not Applicable):**

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Option #3 - Option 3 Reduce energy use by 20% compared to the ASHRAE 90.1 2007 baseline building design if design information is available.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Results of design calculations and/or energy modeling	
	Notes/Comments:	**Justification (if Not Applicable):**		
	2.2 Efficient Products Use ENERGY STAR and FEMP-designated Energy Efficient Products, where available.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	2.3 Onsite Renewable Energy Implement renewable energy generation projects on agency property for agency use, when lifecycle cost effective.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ The ***Change*** column for ***Electricity Use -Generated from Onsite Renewable Systems and Used Onsite*** demonstrates compliance if it is greater than zero. ☐ Design specs and photos ☐ Statement of work ☐ Justification that not lifecycle cost effective ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	2.4 Measurement Per the Energy Policy Act of 2005 (EPAct2005) Section 103, install building level electricity meters to track and continuously optimize performance. Per the Energy Independence and Security Act (EISA) 2007, the utility meters must also include natural gas and steam, where natural gas and steam are used. **ENERGY STAR Certification - Last Approval Date: Not Applicable**	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ ENERGY STAR Certification demonstrates compliance ☐ Statement of work ☐ Billing records ☐ Other: _____	

	Baseline	Current	Change
Year Ending	N/A	N/A	N/A
Electricity Use (kWh)	N/A	N/A	N/A
Electricity Use – Generated from Onsite Renewable Systems and Used Onsite	N/A	N/A	N/A
Percent of Total Electricity Generated from Onsite Renewable Systems	N/A	N/A	N/A

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Notes/Comments:	**Justification (if Not Applicable):**		
	2.5 Benchmarking Compare annual performance data with previous years' performance data, preferably by entering annual performance data into the ENERGY STAR Portfolio Manager and/or Labs 21 for laboratories.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Portfolio Manager's ***Performance Highlights Report*** for two comparative periods. ☐ Current Portfolio Manager Statement of Energy Performance (SEP) ☐ Labs 21 Analysis ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

3. Protect and Conserve Water

✓	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	3.1. Indoor Water Use one or both of the following two options to measure indoor potable water use performance.			
	Option #1 - Option 1 Reduce potable water use by 20% compared to a water baseline calculated for the building. The water baseline, for buildings with plumbing fixtures installed in 1994 or later, is 120% of the Uniform Plumbing Codes (UPC) 2006 or the International Plumbing Codes (IPC) 2006 fixture performance requirements. The water baseline for plumbing fixtures older than 1994 is 160% of the UPC 2006 or the IPC 2006 fixture performance requirements.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Watergy or other analysis ☐ LEED water calculator analysis ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	Option #2 - Option 2 Reduce building measured potable water use by 20% compared to building water use in 2003 or a year thereafter with quality water data. If only one meter is installed for the site, reduce the water use (indoor and outdoor combined) by at least 20% compared to building water use in 2003 or a year thereafter. The metrics below could include non-potable water. See EPA's water meter FAQ . US federal users with metered sources of non-potable water should contact FEMP for more information.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ The ***Change*** column for ***Indoor Water Use (All Water Sources)*** demonstrates compliance. ☐ The ***Change*** column for ***Total Water Use (All Water Sources)*** demonstrates compliance. ☐ Portfolio Manager Water Performance Report ☐ Metered water consumption reduction calculation ☐ Other: _____	

	Baseline	Current	Change
Year Ending	N/A	N/A	N/A
Total Water Use (all Water Sources) (kgal)	N/A	N/A	N/A
Indoor Water Use (All Water Sources) (kgal)	N/A	N/A	N/A
Indoor Water Intensity (All Water Sources) (gal/ft²)	N/A	N/A	N/A

	Notes/Comments:	**Justification (if Not Applicable):**		
	3.2. Outdoor Water Use one or more of the following three options to measure outdoor potable water use performance.			
	Option #1 - Option 1 Reduce potable irrigation water use by 50% compared to conventional methods.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Watergy or other analysis ☐ LEED water calculator analysis ☐ Other: _____	

✓	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Notes/Comments:	**Justification (if Not Applicable):**		
	Option #2 - Option 2 Reduce building related potable irrigation water use by 50% compared to measured irrigation water use in 2003 or a year thereafter with quality water data. If only one meter is installed for the site, reduce the potable water use (indoor and outdoor combined) by at least 20% compared to building water use in 2003 or a year thereafter. The metrics below could include non-potable water. See EPA's water meter FAQ . US federal users with metered sources of non-potable water should contact FEMP for more information.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ The ***Change*** column for ***Outdoor Water Use (All Water Sources)*** demonstrates compliance. ☐ The ***Change*** column for ***Total Water Use (All Water Sources)*** demonstrates compliance. ☐ Portfolio Manager Water Performance Report ☐ Metered water consumption reduction calculation ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	Option #3 - Option 3 Use no potable irrigation water.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Site plan ☐ Landscape plan ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	3.3 Storm Water Employ strategies that reduce storm water runoff and discharges of polluted water offsite. Per EISA Section 438, where redevelopment affects site hydrology, use site planning, design, construction, and maintenance strategies to maintain hydrologic conditions during development, or to restore hydrologic conditions following development, to the maximum extent that is technically feasible.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Storm Water Pollution Prevention Plan ☐ Proof of implementation of EISA Section 438 technical guidance ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

	Baseline	Current	Change
Year Ending	N/A	N/A	N/A
Total Water Use (all Water Sources) (kgal)	N/A	N/A	N/A
Outdoor Water Use (All Water Sources) (kgal)	N/A	N/A	N/A

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	3.4 Water Efficient Products Where available, use EPA's WaterSense ® labeled products or other water conserving products. Choose irrigation contractors who are certified through a WaterSense-labeled program.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

4. Enhance Indoor Environmental Quality

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	4.1 Ventilation and Thermal Comfort Meet ASHRAE Standard 55-2004 Thermal Environmental Conditions for Human Occupancy and ASHRAE Standard 62.1-2007: Ventilation for Acceptable Indoor Air Quality. **ENERGY STAR Certification - Last Approval Date: Not Applicable**	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ ENERGY STAR Certification demonstrates compliance ☐ Stamped Portfolio Manager Statement of Energy Performance (SEP) ☐ Documentation from licensed architect or engineer ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.2 Moisture Control Provide policy and illustrate the use of an appropriate moisture control strategy to prevent building damage, minimize mold contamination, and reduce health risks related to moisture. For facade renovations, Dew Point analysis and a plan for cleanup or infiltration of moisture into building materials are required.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Policy for preventing moisture accumulation and mold in the building ☐ Commissioning / Recommissioning / Retro-commissioning report that includes inspection driven moisture prevention ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.3 Automated Lighting Controls Provide automated lighting controls (occupancy/vacancy sensors with manual-off capability) for appropriate spaces including restrooms, conference and meeting rooms, employee lunch and break rooms, training classrooms, and offices.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Schematic of floor layout showing automated lighting controls ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.4. Daylighting and Occupant Controls Use one or both of the following two options to meet additional daylighting and lighting controls performance expectations.			
	Option #1 - Daylighting Achieve a minimum daylight factor of 2 percent (excluding all direct sunlight penetration) in 50 percent of all space occupied for critical visual tasks.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Indoor daylight measurements ☐ Glazing factor calculations ☐ Computer simulations ☐ Other: _____	

✓	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Notes/Comments:	**Justification (if Not Applicable):**		
	Option #2 - Occupant Controls Provide occupant controlled lighting, allowing adjustments to suit individual task needs, for 50% of regularly occupied spaces.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Schematic of floor layout showing occupant controlled lighting ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.5 Low-Emitting Materials Use low emitting materials for building modifications, maintenance, and cleaning. In particular, specify the following materials and products to have low pollutant emissions: composite wood products, adhesives, sealants, interior paints and finishes, solvents, carpet systems, janitorial supplies, and furnishings.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.6 Integrated Pest Management Use integrated pest management techniques as appropriate to minimize pesticide usage. Use EPA-registered pesticides only when needed.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Integrated pest management plan ☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	4.7 Tobacco Smoke Control Prohibit smoking within the building and within 25 feet of all building entrances, operable windows, and building ventilation intakes.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Environmental tobacco smoke control policy ☐ Other: _____	

✓	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Notes/Comments:	**Justification (if Not Applicable):**		

5. Reduce Environmental Impact of Materials

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	5.1 Recycled Content Per section 6002 of RCRA, for EPA-designated products, meet or exceed EPA's recycled content recommendations for building modifications, maintenance, and cleaning. For other products, use materials with recycled content such that the sum of postconsumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost or weight) of the total value of the materials in the project. If EPA-designated products meet performance requirements and are available at a reasonable cost, a preference for purchasing them shall be included in all solicitation relevant to construction, operation, maintenance of or use in the building. EPA's recycled content products designations and recycled content recommendations are available on EPA's Comprehensive Procurement Guideline web site at www.epa.gov/cpg .	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	5.2 Biobased Content Per section 9002 of FSRIA, for USDA-designated products, use products with the highest content level per USDA's biobased content recommendations. For other products, use biobased products made from rapidly renewable resources and certified sustainable wood products. If these designated products meet performance requirements and are available at a reasonable cost, a preference for purchasing them should be included in all solicitations relevant to construction, operation, maintenance of or use in building. USDA's biobased product designations and biobased content recommendations are available on USDA's BioPreferred web site at www.biopreferred.gov .	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	5.3 Environmentally Preferable Products Use products that have a lesser or reduced effect on human health and the environment over their lifecycle when compared with competing products or services that serve the same purpose. A number of standards and ecolabels are available in the marketplace to assist specifiers in making environmentally preferable decisions. For recommendations, consult the Federal Green Construction Guide for Specifiers at www.wbdg.org/design/greenspec.php	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		
	5.4 Waste Provide reuse and recycling services for building occupants, where markets or on-site recycling exist. Provide salvage, reuse and recycling services for waste generated from building operations, maintenance, repair and minor renovations, and discarded furnishings, equipment and property. This could include such things as beverage containers and paper from building occupants, batteries, toner cartridges, outdated computers from an equipment update, and construction materials from a minor renovation.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Program and education plan for paper, cardboard, plastic, glass, metal ☐ Salvage/recycling agreements ☐ Contract specifications ☐ Other: _____	

☑	Guiding Principle	Action	Supporting Documentation	Responsible Team Member
	Notes/Comments:	**Justification (if Not Applicable):**		
	5.5 Ozone Eliminate the use of ozone depleting compounds where alternative environmentally preferable products are available, consistent with either the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990, or equivalent overall air quality benefits that take into account lifecycle impacts.	○ Yes ○ No ○ In Process ○ Not Assessed ○ Not Applicable (N/A)	☐ Purchasing policy ☐ Construction specifications ☐ Affirmative procurement reports ☐ Other: _____	
	Notes/Comments:	**Justification (if Not Applicable):**		

Supplemental Property & Checklist Information

Property Details & IDs

Portfolio Manager Property ID

Portfolio Manager Property ID	4053460
Portfolio Manager Parent Property ID (if applicable)	Not Applicable

Custom ID's

No Custom IDs have been created for this property

Standard ID's

No Standard IDs have been created for this property

Third Party Certification(s)

None

Compliance Dates

Checklist/Certification	Target Compliance Date	Actual Compliance Date
Sustainable Buildings Checklist		Not Entered

Notes for this Checklist

None

Supporting Documentation on File for Administrative Building of America Checklist

The following documents have been uploaded to Portfolio Manager in support of the Federal Guiding Principles checklist for this property: