Frequently Asked Questions for the State of Colorado's High Performance Certification Program (HPCP)

Contents			
1 F	IPCP Policy5		
1.1	What is the High Performance Certification Program (HPCP)?5		
1.2	What is the criteria for a building project to comply with the HPCP policy?5		
1.3	What is the difference between the High Performance Standard Certification Program referenced in Senate Bill 07-051 and the High Performance Certification Program (HPCP)?		
1.4	What is the intent or purpose of the HPCP program?5		
1.5	What problem is the HPCP solving, why is this program important to the State of Colorado and its local governments?		
1.6	What is the requirement for an "independent third party"?		
1.7	What are the approved "independent third party" guidelines?		
1.8	What is the definition of "Building" 24-30-1305.5 (8)(a)(I), C.R.S.?		
1.9	How is the 5,000 square feet (SF) requirement defined?		
1.10	Why the requirement for "a heating, ventilation, or air conditioning system (HVAC)"7		
1.11	What is an "unconditioned" or "semi-condition" space?7		
1.12	Describe how "unconditioned or semi-condition space" is considered by building code?7		
1.13	Describe how "unconditioned space" is considered in the HPCP?7		
1.14	Describe how "semi-conditioned space" is considered in the HPCP?7		
1.15	What if a project is less than 5,000 square feet?7		
1.16	For projects less than 5,000 sf, what does it mean "but the project is still subject to all other requirements of the life-cycle cost statutes"? Is that supposed to say "of the HPCP?"		
1.17	Does the State's Life-cycle Cost statutes apply to municipalities or counties?8		
1.18	Building Codes Impact because of HPCP?8		
1.19	Why do State Agencies with owned buildings have Mandatory Sustainable Priorities, but DOLA and CDE funded projects don't have any sustainable priorities?		
1.20	Are DOLA Buildings Exempt from the HPCP Policy?		
1.21	Can projects receive a waiver or modification based upon the project scope?8		

1.22 What is the difference between a waiver from the policy and a modification to the policy?
1.23 Are Historic Buildings Exempt from the HPCP Policy?9
1.24 What if the team determines that the increased costs cannot be recouped through decreased operational costs within fifteen years (15) for the substantial renovation?
1.25 How is the program administered by DOLA and CDE? Is there a contact per agency for the HPCP program?
1.26 What is the OSA's HPCP tracking process for projects?9
1.27 How does a project team participate in the HPCP tracking process?
1.28 When and how often is the HPCP tracking form submitted?9
1.29 Who registers and certifies the project with the certification organization? $\dots \dots \dots$
1.30 What organization certificates the HPCP building for the independent third parties?
1.31 How is my grant application time of submission for DOLA and CDE, to be coordinated with the HPCP process?
1.32 How are projects initiated?10
1.33 What reporting and tracking requirements are there for HPCP projects?10
1.34 Will OSA be tracking all HPCP projects including CDE/DOLAs? If they will be, how will they know if there has been a waiver request or to not pursue some of the Sustainability Priority credits?
1.35 How are waivers submitted if the project is from multiple funding sources, which is typical for DOLA and CDE projects?
1.36 What types of costs are to be included in determining Project Cost as it relates to the term "State-Assisted Facility"?
1.37 Are Project Cost and Baseline Budget the same dollar number?
1.38 Where can I find a listing of registration and certification fees?11
1.39 There are numerous LEED and Green Building rating systems available. Which one is required for my building project?
1.40 Can an HPCP renovation project utilize the LEED for Existing Buildings: Operation & Maintenance (LEED-EB: O&M) rating system?
1.41 Why is HPCP LEED guideline only based on LEED-NC? Why not LEED-Core & Shell (CS), Commercial Interiors (CI)?
1.42 What if a project uses a different rating system such as Green Globes or Living Building Challenge?
1.43 The USGBC has update its LEED rating system, what version of the rating system is approved?

1.	44 Are all HPCP projects required to receive third-party certification?
1.	45 Are there any requirements for who should price out the credits?12
1.	46 What if the increased initial costs for implementing the HPCP exceed 5% of the total cost of the substantial renovation or new construction?
1.	47 Do DOLA or CDE project teams ever have direct contact with the OSA?12
1.	48 Can a Project Manager or a Facility Owner also serve as the LEED Accredited Professional on a project?
1.	49 How are the terms "value of the property" or "current value" defined for the purposes of determining the relative value of a renovation project?
1.	50 What are the OSA Sustainable Priorities in the HPCP Requirements?12
2	Project Implementation13
2.	2 What types of consultants or design professionals are potentially necessary as part of a design team?
2.	3 Where does a project team/building owner find providers of services – Commissioning (Cx), Energy Modeling, or a Sustainable Building Consultant?13
2.	4 How does a project initial the process to comply with the High Performance Certification Program (HPCP) and this form is submitted to what State Department?
2.	5 Is there any design assistance available for project teams new to the LEED certification process and high performance building?
2.	6 What is a LEED or CHPS Prerequisite?14
2.	7 What if there is no recycling facility in my region for construction or occupant- generated waste?
2.	8 What happens if, despite the best project management efforts, a project cannot meet the HPCP policy target of LEED-Gold, CHPS-Verified Leader, or Green Globes-Three Globes?
2.	9 We are on track for achieving Gold level LEED certification, but despite our best efforts are unable to meet one of the OSA Sustainable Priorities. What should we do?
3	Definitions
3.	2 What is USGBC-LEED?
3.	3 What is GBCI?
3.	4 What is CHPS?15
3.	5 What is Green Globes?15
3.	6 What is a LEED-Green Associate? Do I need one? How do I find one?15
3.	7 What is a LEED-AP? Do I need one? How do I find one?

3.8	What is ASHRAE, as referenced in the OSA Sustainable Priorities list?	15
3.9	What is the HPCP Champion?	15
3.10	Non-State Controlled Maintenance Definition?	16

1 HPCP Policy

1.1 What is the High Performance Certification Program (HPCP)?

The HPCP is a dynamic sustainable building program established by the Office of the State Architect (OSA) per 24-30-1305.5 C.R.S.. The policy is modified when necessary to reflect new statutes, Governor Executive Orders, and any major modifications to the consensus-based third party green building rating guidelines recognized in the HPCP Policy. This program establishes the minimum performance requirements to the design and construction of a new building or the substantial renovation of an existing building. The policy applies to state owned general funded or academic buildings. The policy applies to non-state buildings which receive moneys guaranteed or insured by the state where such moneys constitute at least 25 percent of the project cost. The HPCP policy is on the OSA web site: Energy Management.

1.2 What is the criteria for a building project to comply with the HPCP policy?

The HPCP is required for building projects that meet the following applicability criteria:

- a. The project receives 25% or more of the renovation or new construction project costs from state funding (note: project cost does not include land purchase); and
- b. The new facility, addition, or renovation project contains 5,000 gross square feet (gsf) or more; and
- c. The building includes a Heating, Ventilation and Air Conditioning (HVAC) system; and
- d. In the case of a renovation project, the cost of the renovation is 25% or more of the current assessed or appraised value of the property.

1.3 What is the difference between the High Performance Standard Certification Program referenced in Senate Bill 07-051 and the High Performance Certification Program (HPCP)?

The statute title refers to the state law. The HPCP is the policy written by the OSA to implement the statute.

1.4 What is the intent or purpose of the HPCP program?

The intent is to increase resource efficiency and incentivize best practices and good design efforts for the design and construction of state owned facilities and state-assisted facilities. The statute defines the program as a building renovation, design and construction standard that:

- a. Is quantifiable, measurable, and verifiable as certified by an independent third party;
- b. Reduces the operating costs of real property by reducing the consumption of energy, water, and other resources;
- c. Results in the recovery of the increased initial capital costs attributable to compliance with the program over a time period by reducing long-term energy, maintenance, and operating costs;
- d. Improves the indoor environmental quality of state-assisted facilities for a healthier work environment;
- e. Encourages the use of products harvested, created, or mined within Colorado, regardless of product certification status;
- f. Protects Colorado's environment; and
- g. Complies with the federal secretary of the interior's standards for the treatment of historic properties when such work will affect properties fifty years of age or older, unless the state historical society, designated in section 24-80-201 C.R.S., determines that such property is not of historical significance, as that term is defined in section 24-80.1-102 (6) C.R.S.

1.5 What problem is the HPCP solving, why is this program important to the State of Colorado and its local governments?

The State of Colorado and all the local jurisdictions construct new facilities and operate existing facilitates that should exist for 50+ years. It was recognized by legislators the importance of buildings that are both constructed and operated with reduced operational costs over the life of the building, have improved indoor air quality, provide a productive space for occupants, and have as little environmental

impact as possible. State and local government needs to "lead by example" and demonstrate the benefits of high performance, green buildings.

1.6 What is the requirement for an "independent third party"?

The term is from the statute, but it does not specifically call out any particular green building rating guideline. An "independent third party" does not refer to building codes enforced by the jurisdiction of authority. See FAQ on codes. The independent third party requirement means that the project's owners may not self-certify their facility.

1.7 What are the approved "independent third party" guidelines?

The statute states (24-30-1305.5): *The Office shall, in consultation with the Colorado commission on higher education (CCHE), adopt and update from time to time a high performance standard certification program* (HPCP). In consultation with CCHE, the Office of State Planning and Budget, the legislative Capital Development Committee, and interested legislators, that the Department of Personnel and Administration, Office of the State Architect has determined the following three guidelines as meeting the High Performance Certification Program (HPCP) requirements per 24-30-1305.5 C.R.S.;

- 1. <u>U.S. Green Building Council</u>, Leadership in Energy and Environmental Design New Construction (USGBC LEED[™] BD+C) guideline with Gold as the targeted certification level,
- 2. <u>Green Building Initiative</u> (GBI), Green Globes guideline with Three Globes the targeted certification level,
- 3. <u>Collaborative for High Performance Schools</u> (US-CHPS) is an optional guideline with Verified Leader as the targeted certification level for K-12 construction.

These guidelines comply with the following statutory requirements:

- a. is quantifiable, measurable, and verifiable as certified by an independent third party;
- b. reduces the operating costs of state-assisted facilities by reducing the consumption of energy, water, and other resources;
- c. results in the recovery of the increased initial capital costs attributable to compliance with the program over a time period by reducing long-term energy, maintenance, and operating costs; and
- d. improves the indoor environmental quality of state-assisted facilities for a healthier work environment.

1.8 What is the definition of "Building" 24-30-1305.5 (8)(a)(I), C.R.S.?

"Building" means a facility that:

- a. Is substantially renovated, designed, or constructed with state moneys or with moneys guaranteed or insured by a state agency or state institution of higher education and such moneys constitute at least twenty-five percent of the project cost; and (II), Contains five thousand (5,000) or more gross square feet; and (III), Includes a heating, ventilation, or air conditioning system.
- "Building" includes an academic facility as defined in section 23-1-106 (10.3)(a), C.R.S., including an academic facility as defined in the guidelines described in section 23-1-106 (10.2)(b)(I), C.R.S. Refer to the OSA Budget Submission Instruction, Section 3, for the definition of Academic facility (<u>https://www.colorado.gov/pacific/osa/cc</u>).

"Building" does not include:

- a. An auxiliary facility as defined in section 23-1-106 (10.3)(b), C.R.S., including an auxiliary facility as defined in the guidelines described in section 23-1-106 (10.2)(b)(I), C.R.S.;
- b. A publicly assisted housing project as defined in section 24-32-718.

1.9 How is the 5,000 square feet (SF) requirement defined?

- New construction that is greater than or equal to 5,000 SF.
- A substantially renovated building greater than or equal to 5,000 SF.

HPCP FAQs, revised July 2019

- An addition to an existing building, if the addition is greater than or equal to 5,000 SF.
- A combined construction project area where the total square footage of an addition and renovated building that is greater than or equal to 5,000 SF.

1.10 Why the requirement for "a heating, ventilation, or air conditioning system (HVAC)".

Green sustainable design guidelines are predominantly concerned with conditioned spaces and buildings. A conditioned space means space within a building in which the temperature is controlled to limit variation in response to the exterior ambient temperature or interior differential temperatures by the provision, either directly or indirectly, of heating or cooling over substantial portions of the year. A HVAC system is the general term of a system that provides the heating or cooling to the building.

1.11 What is an "unconditioned" or "semi-condition" space?

An unconditioned space is not heated or cooled so it is the same temperature (roughly) as outdoor air. An unconditioned space may have a lighting system, but does not have a HVAC system. A semiconditioned space is not conditioned to the same degree as a condition space, but it's not as cold or hot as outdoor air. Semi-condition space maybe an area within a building (attic, garage, basement, etc.) that is not directly impacted by a HVAC system, or a building or attached space to a building that while heated or cooled, is not conditioned for occupancy.

1.12 Describe how "unconditioned or semi-condition space" is considered by building code?

The International Energy Conservation Code, Section 101, Scope and General Requirements, establish requirements for energy code compliance for existing buildings and new construction. Projects complying with any of the three applicability conditions, (101.4.1 - 101.4.3) are also exempt from the HPCP policy. Projects complying the low energy building section (101.5.2) of the IECC code may also be exempt from the HPCP policy. Energy offsets are not an acceptable utility usage process to meet the low energy requirements.

1.13 Describe how "unconditioned space" is considered in the HPCP?

The initial requirement is that the new facility, addition, or renovation project contains 5,000 square feet (SF) or more. For the HPCP building size requirement, the unconditioned space is not counted in the project size requirement to determine applicability of the HPCP. For projects where the total building project size is greater than 5,000 SF, but once the unconditioned space is calculated into the project size and the condition space is less than 5,000 SF, a waiver to the HPCP policy is required.

1.14 Describe how "semi-conditioned space" is considered in the HPCP?

The initial requirement is that the new facility, addition, or renovation project contains 5,000 SF or more. For the HPCP building size requirement, the semi-conditioned space maybe counted in the project size requirement to determine applicability of the HPCP. For projects where the total building project size is greater than 5,000 SF, but once the semi-conditioned space is calculated into the project size and the condition space is less than 5,000 SF, a waiver to the HPCP policy or a modification to the HPCP policy is required. The use of the semi-condition space will determine if a waiver or a modification is applicable.

1.15 What if a project is less than 5,000 square feet?

The statute states that a project that is less than 5,000 square feet (sf) then it must be executed to the standards set out in the HPCP policy even if high performance certification is not pursued at that time. Thus, the project should follow the requirements of an appropriate independent third party sustainable green building guideline, even though registration/certification is not required. Therefore, the project is not required to meet the HPCP certification target, but the project is still subject to all other requirements of the life-cycle cost statutes.

1.16 For projects less than 5,000 sf, what does it mean "but the project is still subject to all other requirements of the life-cycle cost statutes"? Is that supposed to say "of the HPCP?"

Clarification: SB 07-51 amended 24-30-1301 and 24-30-1305 C.R.S., which was originally dedicated to mandating that all state funded projects complete adequate life cycle cost analysis. The HPCP language was than inserted into this statute session. This for buildings under 5,000 SF, they need to comply with the life cycle cost requirements when making design decision on energy-using capital equipment (heating, cooling, lighting, envelope, etc. building components). Projects designed and constructed to the current International Energy Conservation Code as enforced by OSA will comply.

1.17 Does the State's Life-cycle Cost statutes apply to municipalities or counties?

The provisions of the Life-cycle Cost statues (24-30-1304 and 1305 C.R.S.) shall not apply to municipalities or counties nor to any agency or department of any municipality or county. (24-30-1305 (8) C.R.S.)

1.18 Building Codes Impact because of HPCP?

State and local jurisdiction building codes are not superseded by the HPCP policy. All projects need to permit with their appropriate jurisdiction and follow all applicable building codes. The HPCP is not a substitute for complying with building codes, in particular the energy codes. Building codes are generally the minimum requirements and HPCP buildings should easily comply with the energy, mechanical, and plumbing codes.

1.19 Why do State Agencies with owned buildings have Mandatory Sustainable Priorities, but DOLA and CDE funded projects don't have any sustainable priorities?

The additional sustainable priorities are mandatory for state agencies that own and operate their facilities. OSA recognizes that local jurisdictions will operate and maintain their facilities with local funds and not state funds.

1.20 Are DOLA Buildings Exempt from the HPCP Policy?

No. The policy applies to non-state buildings with moneys guaranteed or insured by the state where such moneys constitute at least 25 percent of the project cost (24-30-1305.5 (8)(A) C.R.S.).

1.21 Can projects receive a waiver or modification based upon the project scope?

DOLA and CDE may at their discretion; grant a waiver from the HPCP policy if upon a review of the project the scope fits the "state's" controlled maintenance definition. Generally, this waiver is for projects that renovate only parts of a building and is not a new construction or substantial renovations. The project shall fallow the waiver/modification request process to support a waiver based upon the limited scope of the work. The project team will need to submit a HPCP checklist and additional information that confirms the project scope to DOLA or CDE. The checklist and additional information will be reviewed to verify the limited building scope and the limited ability to meet the minimum certification requirements. HPCP checklist. The waiver will mean the project does not need to register the project, but OSA does encourage the project to follow the Sustainable Priorities as applicable, and in particular, follow the commission requirements for all modified, upgrade, or new systems.

1.22 What is the difference between a waiver from the policy and a modification to the policy?

A <u>waiver</u> form the policy means the project is not required to receive a third party verification of the final building. Thus, no registration with any green building rating system is required. A waiver is generally granted when the project initially meets the criteria (question 1.32), but upon further review, a least one of the criteria is not meet. A <u>modification</u> to the policy is possible when the project meets the criteria, but achieving the goal of Gold, Three Globes, Verified Leader, or a new construction guideline is not possible because of the scope of the project. A modification is to receive a certification at the highest achievable level or a state acceptable third-party verification process.

1.23 Are Historic Buildings Exempt from the HPCP Policy?

No. Historic are required to comply with the policy while complying with the federal secretary of the interior's standards for the treatment of historic properties. Facilities, including historic buildings undergoing substantial renovation can determine if the increased cost cannot be recouped from decreased operational costs within fifteen years (15) and seek a modification of the policy to a certification level below the HPCP goal.

1.24 What if the team determines that the increased costs cannot be recouped through decreased operational costs within fifteen years (15) for the substantial renovation?

If the project team's estimated project costs and estimated operational costs do not predict a fifteen year (15) return on investment at the HPCP target level, then a modification of the policy to achieve a reduced level of certification is required to be submitted to the appropriate funding state department by an accredited professional. The 15 year calculation is determined not on a point by point basis, but as a aggregation of all the points within the project. Example, the 15 year calculation would not review just the cost/benefit of a window replacement, but the total cost/benefit of improving the building envelop (roof, walls, doors, etc.) and the cost/benefit of all the other credits on the checklist. This determination shall be made early in the design phase and prior to completion of the design documents. The modification request shall include a completed HPCP Checklist. The modification request form is part of the HPCP Registration worksheet within the OSA HPCP Registration-Checklist spreadsheet and can be found at: OSA Energy Management, New Construction / Major Renovations.

1.25 How is the program administered by DOLA and CDE? Is there a contact per agency for the HPCP program?

Both DOLA and CDE have individuals within their department to coordinate with OSA. For jurisdictions that receive state funds for a HPCP project, they are expected to work with either the DOLA and CDE designated individual. Both DOLA and CDE have annual reporting requirements to the Legislative Capital Development Committee (CDC). OSA will provide support for this annual report on contracting documents, project guidelines, and reporting and tracking procedures related to the implementation of this statute.

1.26 What is the OSA's HPCP tracking process for projects?

The OSA HPCP tracking process consists of a registration form and checklist. The forms are in one spreadsheet call the "The OSA HPCP Registration-Checklist form" found on the <u>OSA Energy</u> <u>Management, New Construction / Major Renovations</u> web site. The registration form tracks some basic information about the project and is also the form used in the waiver/modification request process. The purpose of the HPCP tracking process is to ensure that project teams understand the intent and requirements of the HPCP policy; support any waiver/modification requests, track the projects certification progress, and to track any additional cost to achieve certification. The forms also help with the reporting requirements of OSA, DOLA, and CDE.

1.27 How does a project team participate in the HPCP tracking process?

The OSA HPCP Registration-Checklist form is filled out and submitted to OSA, DOLA, or CDE depending on source of funds.

1.28 When and how often is the HPCP tracking form submitted?

The form is submitted it the department reviewing the project for funding. DOLA grantees need to submit their form to DOLA. CDE Best grant clients need to submit their form to CDE. State agencies and institutions of higher education need to submit their forms to OSA. Check with each department to review their registration process. The form can be submitted early in the project development stage, when setting the project's total design/construction budget, or at the latest, after funding has been

appropriated and the design team selected. For a project that is going to be certified, at any level, the HPCP FAQs, revised July 2019 9

form can be submitted to support a budget request or after funding, has been appropriated and the design team selected. For projects going through the certification process, updated forms are required upon registration with the certification organization and upon receiving final building rating.

1.29 Who registers and certifies the project with the certification organization?

Registration will be completed by the project design firm. This same design firm will coordinate with the building owner and the certification organization on the certification process. Neither OSA, CDE, nor DOLA are involved with the registration/certification process with the independent third party.

1.30 What organization certificates the HPCP building for the independent third parties?

Each the independent third party reviews and certifies buildings to their own guidelines.

- 1. For LEED projects, the Green Business Certification Inc. (GBCI) performs third-party technical reviews and verification of LEED-registered projects,
- 2. Green Building Initiative (GBI), administers their own certification process for their registered projects,
- 3. Collaborative for High Performance Schools (US-CHPS) administers their own process with both internal CHPS review and an assigned 3rd Party accessor.

1.31 How is my grant application time of submission for DOLA and CDE, to be coordinated with the HPCP process?

The application process itself, will not be impacted by the HPCP requirements. The development of the project scope of work could be impacted by the HPCP requirements. The design and construction of the project could be impacted by the HPCP requirements.

1.32 How are projects initiated?

State agencies or institutions of higher education initiate their projects within the existing process with either the OSA or CDHE. DOLA projects start by working with the DOLA local representative and funding application. CDE projects start by working with the BEST board and their staff.

1.33 What reporting and tracking requirements are there for HPCP projects?

OSA will work directly with the DOLA and CDE responsible individuals on the tracking and reporting system. The information will be reported to the department allocating the funds. OSA will collect from DOLA and CDE any necessary information. The information collected will be used by OSA, DOLA and CDE to complete their respective reporting requirements to the general assembly and appropriate governing bodies.

1.34 Will OSA be tracking all HPCP projects including CDE/DOLAs? If they will be, how will they know if there has been a waiver request or to not pursue some of the Sustainability Priority credits?

OSA will track all projects they directly monitor and will work with DOLA and CDE to report on the projects they monitor. The reports from DOLA and CDE will list project information including any waiver or modifications granted.

1.35 How are waivers submitted if the project is from multiple funding sources, which is typical for DOLA and CDE projects?

Waivers are submitted to either DOLA or CDE. The amount and source of funds are considered within a request for a waiver or modification of the HPCP policy.

1.36 What types of costs are to be included in determining Project Cost as it relates to the term "State-Assisted Facility"?

Project Cost is defined as:

- Total costs for professional design services and construction administration
- Total costs for construction of the building project, including General Conditions in Division I
- Costs related to construction warranty period
- Costs related to commissioning services including those in post-occupancy
- Costs related to the independent third party fees for registration and certification
- Costs related to any green sustainable building consultant and energy modeling services.

Project cost does not include any land acquisition expenditures, including any title work, land surveying, and a phase 1 EPA environmental survey.

1.37 Are Project Cost and Baseline Budget the same dollar number?

Yes, and any other term if they meet the project cost definitions as listed above.

1.38 Where can I find a listing of registration and certification fees?

- 1. U.S. Green Building Council,
- 2. Green Building Initiative (GBI),
- 3. Collaborative for High Performance Schools (US-CHPS).

1.39 There are numerous LEED and Green Building rating systems available. Which one is required for my building project?

The HPCP policy was developed to address new construction (NC) and substantial renovation projects. Thus, it is expect the project will utilize a NC guideline. A renovation project may be a better fit within a difference LEED or Green Globes guideline and a modification to the policy is required to utilize the other guideline.

1.40 Can an HPCP renovation project utilize the LEED for Existing Buildings: Operation & Maintenance (LEED-EB: O&M) rating system?

Projects involving substantial renovations of existing buildings *cannot* use the LEED for Existing Buildings: Operation & Maintenance (LEED-EB: O&M) rating system to comply with the HPCP. LEED-EB: O&M was designed to certify operations and maintenance initiatives aimed at sustainability and resource efficiency. The State of Colorado does recommend that building owners pursue LEED-EB: O&M strategies and certification, however it is outside the scope of the HPCP.

1.41 Why is HPCP LEED guideline only based on LEED-NC? Why not LEED-Core & Shell (CS), Commercial Interiors (CI)?

OSA has started with LEED-NC for the HPCP, but does recognize that some of the other USGBC guidelines may be appropriate. The waiver/modification process will allow for other guidelines, such as CI or CS.

1.42 What if a project uses a different rating system such as Green Globes or Living Building Challenge?

The USGBC-LEED guidelines is the preferred standard. The other standards are acceptable for state projects with prior approval from OSA.

1.43 The USGBC has update its LEED rating system, what version of the rating system is approved?

Projects must follow the registration requirements of the USGBC and GBCI. Information of the most current version can be found online at <u>www.gbci.org</u>. Projects typically must use the most current version of LEED at the time of project registration. If a new version becomes available after that time, projects have the option to officially register with that new version. It is important to note that new versions may have different and/or stronger requirements for obtaining certain credits, and this may or may not be desirable for a given project. The HPCP will update the program requirements and prerequisites to reflect new versions of LEED upon release. However, projects registered under the previous version will not be subject to the revisions.

1.44 Are all HPCP projects required to receive third-party certification?

Yes. The legislation that created the HPCP requires independent third-party certification.

1.45 Are there any requirements for who should price out the credits?

The design team should review the criteria for price and benefits.

1.46 What if the increased initial costs for implementing the HPCP exceed 5% of the total cost of the substantial renovation or new construction?

The statute states that in such cases, the General Assembly's Capital Development Committee shall examine cost estimates before approving any appropriation for these projects. This provision applies only to state-owned and state-funded building projects and does not apply to DOLA or CDE. DOLA or CDE can determine if additional funding is available to a project if requested and meets their internal criteria.

1.47 Do DOLA or CDE project teams ever have direct contact with the OSA?

DOLA and CDE project teams will communicate directly with their respective funding agencies. The DOLA and CDE representative will communicate with OSA as necessary to review modification or waiver requests, department reporting requirements, and general comprehension of the HPCP policy.

1.48 Can a Project Manager or a Facility Owner also serve as the LEED Accredited Professional on a project?

Yes.

1.49 How are the terms "value of the property" or "current value" defined for the purposes of determining the relative value of a renovation project?

Current replacement value (CRV) is the term generally used by OSA. For the HPCP, the "value of the property" or "current value" is the insured value of the building as either determined through the State's Division of Risk Management, or an equivalent office for specific institutions of higher education, or a local jurisdictions insurance carrier. The assessed value is also acceptable, but appraisals are not required or expected to obtain the CRV.

1.50 What are the OSA Sustainable Priorities in the HPCP Requirements?

These are specific HPCP credits that the OSA has deemed to be of a higher importance to achieve than some of the other optional HPCP credits that might be pursued for certification. These Sustainable Priority credits reflect the importance the OSA places on reducing energy and water use, carbon emissions, and providing a healthy indoor air quality for its community.

Review the sustainable guidelines posted on the OSA website.

2 **Project Implementation**

2.2 What types of consultants or design professionals are potentially necessary as part of a design team?

High performance buildings include some professional design services that may be new for some project teams. The following are a few professionals that may support the project's certification process.

- The sustainable building consultant, or champion, may be needed to oversee the projects green building guideline's assessment process. Both LEED and Green Globes certify individuals who are trained to support the certification process. The CHPS program does not certify professionals, but a LEED or Green Globe trained individual have the skills to support the assessment process. The champion is responsible for the certification process for the entire project from pre-design through post-occupancy and certification award.
- A Commissioning Authority (CxA) is required for HPCP projects to verify that the project's energy related systems are installed, calibrated and perform according to the owner's project requirements, basis of design, and construction documents. This person is typically an engineer who ideally, is involved in the project prior to schematic design. In the case of enhanced commissioning services, this would occur very early in the process of verify the basis of design for a project.
- Energy modeling is a process to calculate the projected energy use of the building and to drive design decisions regarding performance. An energy engineer professional typically prepares the energy model calculations. Energy modeling is necessary for most HPCP projects.
- Daylighting is a design strategy for reducing artificial lighting use and the associated cooling demand, in addition to creating a connection to the outdoors for occupants. Designing and calculating for daylighting methods may require expertise to support the design team. Some projects may opt for the daylight computer simulation or measurement compliance paths and will use the services of an engineering professional with expertise in daylight modeling. Smaller or simpler projects may opt for the Prescriptive compliance path, which the team architect may be comfortable preparing.

2.3 Where does a project team/building owner find providers of services – Commissioning (Cx), Energy Modeling, or a Sustainable Building Consultant?

As part of a design selection review process, the building owner may as the design firm their knowledge of local, qualified consultants. The design firm may have within its firm the skills to providing energy modeling or a sustainable building consultant. The Cx agent, depending of the scope of their work, maybe part of the firm or a true third party reviewer. The design firm may have a list of firms they have worked with in the past that could provide the Cx services. Depending of the Cx requirement, the firm should work directly with the building owner, or, the design firm. The preference is to work for the building owner, and thus be responsible to the owner and not the design firm.

2.4 How does a project initial the process to comply with the High Performance Certification Program (HPCP) and this form is submitted to what State Department?

The HPCP Initiation Form is used to start the process for all project teams and can be found at: <u>OSA</u> <u>Energy Management Programs</u>. This form is the first worksheet (HPCP Registration) within the OSA HPCP Registration-Checklist Forms spreadsheet. The form should be completed and submitted electronically to either OSA, DOLA, or CDE depending on which department is the source of the funds.

2.5 Is there any design assistance available for project teams new to the LEED certification process and high performance building?

No, the funds for assistance was part of the ARRA funds and this federal funded program has ended.

2.6 What is a LEED or CHPS Prerequisite?

Both rating system guidelines consists of prerequisites and credits. The prerequisites are specific mandatory minimum requirements found in all the main categories and must be achieved for building certification. The first step in the final review process by the certification organization is a review of the prerequisites. The project will not be reviewed if the prerequisites are not completed.

2.7 What if there is no recycling facility in my region for construction or occupantgenerated waste?

Diverting construction waste from the landfill is one of the OSA Sustainable Priority credits, a modification request form would need to be submitted to the OSA for review early in the design stages. Also keep in mind that while your community or region may not have recycling facilities for construction waste materials, donating the still-useful but unused materials to the community serves to keep them out of the landfill and also gualifies towards this LEED credit.

Regarding occupant-generated refuse, this is a prerequisite of both LEED and CHPS and must be undertaken to the extent that your community is providing recycling services.

2.8 What happens if, despite the best project management efforts, a project cannot meet the HPCP policy target of LEED-Gold, CHPS-Verified Leader, or Green Globes-Three Globes?

This assumes the project initially was designed with construction specifications that were complying with the HPCP target, but the certification organization did not award sufficient credits to achieve the state's HPCP goal.

For state agencies, at the competition of the project, the HPCP Champion shall complete and submit final checklist with incremental cost to OSA. The project shall be submitted for certification at the highest achievable level. A list of all the credits appealed and the results of the appeal process should be documented on the applicable HPCP checklist to support the certification at the highest achievable level. The final certification results from GBCI will be copied and submitted to the appropriate state department.

DOLA and CDE, submit final checklist as part of their department's project close-out process and documentation.

2.9 We are on track for achieving Gold level LEED certification, but despite our best efforts are unable to meet one of the OSA Sustainable Priorities. What should we do?

For state agencies, at the competition of the project, the HPCP Champion shall complete and submit final checklist indicating which sustainable priorities they were not able to fulfill. A brief discussion on each priority should be submitted with the checklist explaining the major reasons for not complying.

DOLA and CDE, submit final checklist as part of their department's project close-out process and documentation.

3 Definitions

3.2 What is USGBC-LEED?

U.S. Green Building Council (USGBC) is a non-profit organization committed to cost-efficient and energy-saving green buildings through it's' mission of market transformation through its LEED[™] green building certification program. LEED stands for Leadership in Energy and Environmental Design. LEED is an internationally recognized third-party verified green building certification system that measures how well a building performs across all the metrics that matter most: energy efficiency, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. U.S. Green Building Council and information on the LEED ratings can be

accessed at: <u>www.usgbc.org</u>. USGBC maintains the guidelines, but the verification of the project is performed by GBCI.

3.3 What is GBCI?

Green Building Certification Institute (GBCI) established in January 2008, provides third-party project certification and professional credentials recognizing excellence in green building performance and practice. GBCI administers project certification for commercial and institutional buildings and tenant spaces under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems[™] addressing new construction and ongoing operations. www.gbci.org

3.4 What is CHPS?

The Collaborative for High Performance Schools (CHPS) is a non-profit organization dedicated to making schools better places to learn. The mission of CHPS is to nationally foster well-designed, operated, and maintained K-12 educational facilities that enhance student performance; positively impact student, teacher, and staff health and wellness; make education more enjoyable and rewarding; and promote positive environmental stewardship. The guideline was initially developed in 1999 and practices continuous updates. The guideline is a nationally third-party verified green building certification system that measures how well a building performs across all the metrics that matter to K-12 schools: energy, water and material efficient, well-lit, thermally comfortable, acoustically sound, safe, healthy and easy to operate. CHPS maintains the guidelines and performs the verification of the project.

3.5 What is Green Globes?

The Green Building Initiative® (GBI) seeks to be innovative and provide responsive customer service as we collectively move the needle toward a sustainable built environment. We recognize that credible and practical green building approaches for commercial and governmental construction are critical in this effort. Responding to the reality that one size does not fit all in sustainable improvements, we sought to create a more tailored approach that takes into account the building's type, purpose, and occupants. <u>http://www.greenglobes.com</u>

3.6 What is a LEED-Green Associate? Do I need one? How do I find one?

A LEED-Green Associate is an individual who can denote basic knowledge of green design, construction, and operations. A LEED-Green Associate is not required for a project, but is strongly recommended, and there is a point available in the rating system if a team member has the designation. You can find a directory of LEED-Green Associates on the USGBC website at <u>www.usgbc.org</u>.

3.7 What is a LEED-AP? Do I need one? How do I find one?

A LEED-AP is a LEED Accredited Professional. A LEED-AP is not required for a project, but is strongly recommended, and there is a point available in the rating system if a team member has the designation. You can find a directory of LEED-APs on the USGBC website at <u>www.usgbc.org</u>.

3.8 What is ASHRAE, as referenced in the OSA Sustainable Priorities list?

ASHRAE stands for the American Society of Heating, Refrigerating, and Air-Conditioning Engineers. Standards in the building design industry that have been established by ASHRAE have been adopted as reference standards in some of the LEED or CO-CHPS credits that relate to energy, refrigeration, and air movement.

3.9 What is the HPCP Champion?

The HPCP Champion is defined for a USGBC project an LEED Green Associate or a LEED-Accredited Professional as certified by GBCI. For a CO-CHPS, the champion could be either a LEED GBCI certified individual or a profession architect or engineer with experience with a USGBC or CHPS project. The

champion could be a member of the owner's team, a individual within the professional design team, or a third party outside consultant. This individual reports directly to the owner (even if part of the professional design team staff) and has sufficient input into the design and construction documents to direct the project to comply with the HPCP policy.

3.10 Non-State Controlled Maintenance Definition?

Corrective repairs or replacement used for existing buildings and other physical facilities, including, but not limited to, utilities and site improvements, and replacement and repair of the fixed equipment necessary for the operation of such facilities. Controlled Maintenance (CM) is also known as deferred maintenance by some national associations. Examples of a CM type of project are: repairs/replacement to the electrical, plumbing, mechanical system without any modifications to the building enclosure (envelope); repairs/replacement to the building enclosure (windows, walls, roof) without any modification to the heating/cooling system.