

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

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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 Colorado Senate Bill (SB) 07-51 and amended by SB 08-147. This program establishes the minimum performance requirements for qualifying state-assisted facilities and ensures that projects pursue and achieve the appropriate third-party certification during their construction of new facilities, the renovation of existing facilities, or the addition to existing facilities. The HPCP policy can be found on the OSA web site under: [Energy Management Programs](#).

1.2 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.

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

The intent is to increase resource efficiency for state-assisted buildings and incentivize best practices and good faith efforts for the design and construction of State owned facilities to comply with the HPCP. The purpose is clearly stated in the original Senate Bill 07-51. The legislation 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 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;
- 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, determines that such property is not of historical significance, as that term is defined in section 24-80.1-102 (6).

1.4 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 facilities that are expected to exist for 50+ years. It has been recognized by legislators the importance of buildings that are both constructed and operated with reduced operational costs over the life of the building, improved indoor air quality and productivity 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.

1.5 What is the requirement for an “independent third party”?

The term is from the statute, but it does not specifically call out any particular building rating system. Building codes are in a different section of Colorado statutes and are not considered the “independent third party” (see FAQ on codes). The requirement means that the project’s owners may not self certify their facility.

1.6 What “independent third party” standards are approved?

The statute states: *The Office of the State Architect, or an analogous successor office in the department, 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, it was decided that the USGBC LEED rating system and CO-CHPS are the most appropriate guidelines to adopt that will meet the intent of the legislation for state-assisted facilities. In September 2009, CO-CHPS was determined to be an acceptable guideline for K-12 facilities. Both LEED and CO-CHPS are guidelines that comply 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.

1.7 What does a state-assisted facility mean (C.R.S. 24-30-1301 (13))?

"State-assisted facility" means a facility constructed, or a major facility constructed or renovated, in whole or in part, with state funds or with funds guaranteed or insured by a state agency.

Except that, for purposes of section 24-30-1305 (9):

- a. "State-Assisted Facility" means a facility that: (I), Is substantially renovated, designed, or constructed with state funds or with funds guaranteed or insured by a state agency and such funds 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.
- b. "State -Assisted Facility" does not include: (I), A facility specified in section 23-1-106 (9), C.R.S. (Institutions Of Higher Education-Auxiliary Funded Facilities); or (II) A publicly-assisted housing project, as that term is defined in section 24-32-718 (DOLA, Division of Housing)

1.8 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.
- An addition to an existing building, if the addition is greater than or equal to 5,000 SF.
- A combined total square footage of an addition and renovated building that is greater than or equal to 5,000 SF.

1.9 Define "Includes a heating, ventilation, or air conditioning system". Is it regularly occupied space? Is it heated or cooled space? How do I treat unconditioned space (storage, warehouse, etc.)

The International Energy Conservation Code of 2006, 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 2006 code may also be exempt from the HPCP policy. Energy offsets can not be used to meet the low energy requirements.

1.10 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) shall be executed to the standards set out in the HPCP policy even if high performance certification is not pursued at that time. 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.

1.11 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 CRS 24-30-1301 and 24-30-1305, which was originally dedicated to mandating that all state funded projects complete adequate life cycle cost analysis. The HPCP language was then inserted into this statute. So this is saying that for buildings under 5,000 SF, they still need to comply with the life cycle cost requirements when making capital equipment purchasing decisions on energy-using equipment. Projects designed and constructed to the International Energy Conservation Code as enforced by OSA are considered to comply.

1.12 Does the State’s Life-cycle Cost statutes apply to municipalities or counties?

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

1.13 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.

1.14 Why do State Agencies with Owned Buildings have Mandatory Sustainable Priorities, but DOLA and CDE funded projects have recommended Sustainable Priorities?

The additional sustainable priorities are mandatory for state agencies that own and operate their facilities. For DOLA and CDE grantees, the LEED or CO-CHPS certification level requirement are the same. OSA recognizes that local jurisdictions will operate and maintain their facilities with local funds and not state funds. Therefore, the sustainable priorities are only recommended guidelines.

1.15 Are DOLA Buildings Exempt from the HPCP Policy?

DOLA had received a temporary exemption from OSA for their projects. This exemption has ended effective June 30, 2010.

1.16 Can projects receive an exemption based upon when design started, construction started, or project budget determined?

Buildings that have selected a design firm before January 1, 2008 are exempt per SB 07-051. SB 08-147 brought DOLA projects under the statute effective August 6, 2008. OSA does recognize that for local jurisdictions, time gaps exist between project initiation and securing final funding. DOLA and CDE projects may request and potentially be granted an exemption based upon the project’s planning/funding history. The exemption request is not the same as a waiver/modification request since the exemption is based upon the start date of the project and not on the uniqueness of the project.

1.17 Can projects receive a waiver 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 non-state controlled maintenance definition. Generally, this waiver is for projects that renovate buildings and not new construction. The project shall follow the 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. DOLA and CDE will review the information to verify that there are not a sufficient amount of building systems or components repaired/replaced to meet the minimum certification requirements. 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.

1.18 Are Historic Buildings Exempt from the HPCP Policy?

No. Historic are required to comply with the policy while complying to 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) seek a modification of the policy to a certification level below the HPCP goal.

1.19 What if our team determines that the increased costs cannot be recouped through decreased operational costs within fifteen years (15) for our 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 an 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 and construction documents. The modification request shall include a completed HPCP Checklist. The modification request shall also include detailed project costs and estimated operational costs. 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 Programs](#).

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

It is anticipated that for both DOLA and CDE, they will designate one individual as the lead 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 and GEO will provide support for this annual report on contracting documents, project guidelines, and reporting and tracking procedures related to the implementation of this statute.

1.21 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 [OSA Energy Management Programs](#) web site. The registration form tracks some basic information about the project and also is utilized as the modification/waiver request form. The purpose of the HPCP tracking process is to ensure that project teams understand the intent and requirements of the HPCP policy; support any modification/waiver 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.

1.22 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.

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

For a project that is requesting a waiver from the HPCP, the form could be submitted early in the project development stage or after funding has been appropriated and the design team selected. For a project that is going to be certified, at any level, the 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.

1.24 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 (GBCI or CO-CHPS) on the certification process. OSA is not directly involved with the certification process.

1.25 Who ensures the LEED certification?

Certification of HPCP facilities that are following the LEED guidelines will be managed through the GBCI organization. For buildings that received a modification to the HPCP policy, OSA will work with DOLA and CDE to verify that they are certified at the reduced LEED level and meet the agreed to minimum statutory requirements.

1.26 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 work before the application is submitted and the work required after the funds are granted could be impacted by the HPCP requirement. It is the goal of GEO, through the HPCP consultant, to help DOLA /CDE and the grantees to recognize when the HPCP requirements need to be followed and to support each grantee with their application process and subsequent funding (design) proceeds.

1.27 How are projects initiated?

State agencies initiate their projects within the existing process with either the CDHE or OSPB. 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.

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

OSA will work directly with the DOLA and CDE responsible individuals to develop a tracking and reporting system. The information will be reported to their respective department. 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.

1.29 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 to not pursue LEED 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.

1.30 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.

1.31 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 LEED fees for registration and certification, and LEED 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.

1.32 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.

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

Registration and certification fee schedules can be found at the Green Building Certification Institute webpage, www.gbci.org, under the Project Registration section. There is a discounted fee for USGBC members. The agency does not necessarily need to be the USGBC member. The LEED Champion membership will qualify for this discount.

1.34 Where can I find a listing of CO-CHPS registration and certification fees?

Registration and certification fee schedules can be found at the CHPS webpage, www.chps.net, under the CHPS Resources section, Recognition Programs. Follow the link to CHPS Verified and open the CHPS Verified User Guide pdf file. The registration procedure and fees schedule are explained. There is a discounted fee for CHPS members.

1.35 There are numerous LEED rating systems available. Which one is required for my building project?

The HPCP is only designed to address new construction and substantial renovation projects. Therefore, the following rating systems are required by building type:

- LEED for New Construction and Major Renovations (LEED-NC) for all non-K-12 school buildings
- LEED for Schools for K-12 buildings or,
- CO-CHPS for K-12 buildings.

1.36 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 is 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.

1.37 Why is HPCP LEED guideline only based on LEED-NC? Why not LEED-Core & Shell (CS), Commercial Interiors (CI) or Existing Buildings: Operations and Maintenance (EB O&M)? (Note: 2007 version of HPCP document should be changed if no LEED-EB applies.)

LEED-EB O&M is not appropriate for the HPCP due to the time requirements of one full year of occupancy after a major renovation. OSA has started with LEED-NC for the HPCP, but does recognize that some of the other USGBC guidelines may be appropriate. The waiver process will allow for other guidelines, such as CI and CS to be considered.

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

Currently, only the USGBC-LEED and the CO-CHPS guidelines are approved for Colorado applicable projects. Green Globes and the Living Building Challenge are under review, but are not an approved guideline tool.

1.39 The USGBC updated its LEED rating system in April 2009 to the new LEED 2009 version. Which version of the rating system do we use?

Projects must follow the registration requirements of the USGBC and GBCI. Information of the most current version can be found online at www.gbci.org. 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.

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

Yes. The legislation that created the HPCP requires independent third-party certification. Certification through the LEED Green Building Rating System and Colorado Collaborative for High Performance Schools are currently the approved certification guidelines by the OSA.

1.41 Are there any requirements for who should price out the LEED credits or CO-CHPS? Officially certified cost estimator or licensed architect or professional engineer? Are the requirements for predicting the operational cost savings based on an energy model by a Certified Energy Manager or professional engineer?

A LEED Accredited Professional is the minimum requirement for who should be pricing the LEED credits. For CO-CHPS projects, a LEED-AP or professional architect or engineer is required.

1.42 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.

1.43 Do projects receiving DOLA or CDE grant funding have to comply with HPCP even if initial implementation costs exceed 5% of the total cost of the substantial renovation?

Projects that are state funded that are DOLA or CDE that exceed 5% of total cost can request a waiver from the HPCP policy.

1.44 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.

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

Yes.

1.46 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.

1.47 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.

The Office of the State Architect **strongly encourages** the following OSA Sustainable Priorities in addition to the eight to ten LEED prerequisites, to be incorporated into the project in the appropriate LEED Rating System. The following apply to LEED v3.

- a. Energy and Water Efficiency resulting in Operational Savings
 - i. 24% reduction in energy by cost method based on ASHRAE 90.1 – 2007 for new construction; 20% reduction for renovations (EAc1)
 - ii. Enhanced Commissioning of energy systems (EAc3) for projects greater than 20,000 square feet
 - iii. Measurement and Verification of energy and water systems (EAc5) for projects greater than 50,000 square feet
 - iv. 50% reduction of landscape water (potable) based on LEED calculators (WEc1)
 - v. 30% reduction of indoor water use (potable) based on LEED calculators (WEc3)
- b. Healthy Indoor Environmental Quality for an enhanced work and/or learning environment
 - i. Low toxicity materials-Achieve two of the following: IEQc4.1, 4.2, 4.3, 4.4
 - ii. Daylighting (IEQc8.1)
- c. Construction Waste Management & Local Materials
 - i. 50% diversion rate of construction waste from landfill (MRc2)
 - ii. Source as many materials from Colorado region as possible (MRc5)
 - iii. Achieve Regional Materials Credit (MRc5) while sourcing as many materials from Colorado as practical

Complete the Governor's Energy Office (GEO) FLEX Energy Tool Worksheet

2 Project Implementation

2.1 What types of consultants or design professionals do we need to include on our 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 you may be adding to your team:

- The LEED or CO-CHPS consultant, or champion, will be needed to administer either the LEED program or CO-CHPS program and the integrated whole systems design process. For a LEED registered project, this person needs to be a LEED Accredited Professional (AP) and will ideally be experienced in previous LEED certified building projects. The CO-CHPS program does not have credits for professional accreditations, but an individual with previous CHPS or LEED experience is preferred. 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 brought into the project during schematic design. In the case of enhanced commissioning services, this would occur no later than the mid-construction documents phase.
- Energy modeling is performed to calculate the projected energy use of the building and to drive design decisions regarding performance. An energy engineering professional typically prepares the energy model calculations, which 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 be beyond your design teams' expertise. 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.

2.2 Where do we find providers of services – Cx, Energy Modeling, LEED Consultant?

It is not the task of GEO to maintain a list of qualified professional firms that can provide commissioning (Cx), energy modeling, LEED consulting, or other related services. The GEO HPCP consultants can provide general information on what to expect from particular professional firms. Ask your local design firm for a list of potential consultants.

2.3 How do we initiate our project 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: [OSA Energy Management Programs](#). 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.

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

Yes. The Governor's Energy Office (GEO) has a High Performance Building Program that supports participation in the HPCP. Some examples are listed below. Further information on this program is available within the commercial and public buildings, high performance buildings links, at: www.colorado.gov/energy.

- Provide technical assistance early in the planning and design phase of eligible projects to support an understanding of the intent and requirements of the HPCP and the technical elements of achieving an exemplary building. These services will not replace the need for the project to hire an experienced LEED Champion.
- Provide education and training for facility owners and design and construction professionals that include supporting an early integrated design process. The GEO will be working with numerous professional organizations to provide workshops and trainings for targeted audiences such as owners, architects, engineers, and contractors. Check the GEO website for a schedule of trainings.
- Provide resources for Financial Incentives.
- Develop and disseminate best practices for high performance design in Colorado. The GEO will develop case studies to share lessons learned and provide Colorado-specific tools to further assist its partner projects.

2.5 What is a LEED or CO-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.

2.6 What if there is no recycling facility in my region for construction or occupant-generated 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 qualifies 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.

2.7 How many LEED credit points are possible through LEED v3?

There are 110 possible LEED credit points available that can be selected to achieve certification, including 10 potential bonus points. 60 points is the minimum needed to achieve Gold level certification.

2.8 How many CO-CHPS credit points are possible?

There are 126 possible credit points available that can be selected to achieve certification. 60 points is the minimum needed to achieve verified leader certification.

2.9 Where can I find some typical fee costs for some of the LEED-related professional services such as the Commissioning Authority, the LEED Consultant, and Energy modeling?

These costs can be found through the GEO High Performance Building Program at www.colorado.gov/energy.

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

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.

2.11 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.

2.12 What is the Governor's Energy Office FLEX Energy Tool?

The FLEX Energy Tool is used to identify and calculate building program requirements for various forms of clean renewable energy that is to be generated onsite for a project. This information is used to design the necessary provisions into the building for the current or future installation of renewable energy options.

2.13 What benefits come with official LEED registration through the Green Building Certification Institute (GBCI)?

LEED registered projects can manage the LEED certification process through LEED-Online, the USGBC project management tool. Through LEED-Online come the following benefits:

- Document compliance with LEED credit requirements
- Access LEED resources for registered projects only
- Coordinate credit responsibilities amongst project team members
- Submit technical inquiries regarding LEED credits
- Track progress towards LEED certification
- Communicate with team members and certification bodies
- Track LEED point assignments for team members and overall progress
- Submit LEED documents for review and certification to GBCI

2.14 Why is there a difference of 8 or 10 LEED Prerequisites for DOLA and CDE projects?

The LEED 2009 for New Construction rating system, or LEED-NC, has eight Prerequisites, which DOLA will be using. CDE will be applying the LEED 2009 for Schools for New Construction or LEED for Schools-NC, which has an additional two Prerequisites for a total of ten.

2.15 Is specification software available in the industry for architects to use in preparing the LEED Requirements for Construction Documents?

Yes. BSD SoftLink, ARCOM Masterspec, SpecText and GreenSpec Directory Guideline Specifications are some products on the market to investigate.

3 Definitions

3.1 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 its 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: www.usgbc.org. USGBC maintains the guidelines, but the verification of the project is performed by GBCI.

3.2 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

3.3 What is CO-CHPS?

The Collaborative for High Performance Schools (CHPS) is a non-profit organization dedicated to making schools better places to learn. 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. CO-CHPS maintains the guidelines and performs the verification of the project. The program has expanded to eleven states, including Colorado. www.chps.net

3.4 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 www.usgbc.org.

3.5 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 www.usgbc.org.

3.6 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.

3.7 What is the HPCP Champion?

The HPCP Champion is defined for a USGBC project as a 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 professional 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.

3.8 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.