## **Connecticut College Sustainable Building Policy and Practices**

Connecticut College will incorporate sustainability as a foundational principle for new construction and major renovation projects, ensuring that sustainability is woven through all stages of every project. By adhering to this document, the College will strive to achieve a net zero campus.

### **Is Construction Needed?**

Before engaging in any new construction or renovation project, the College is committed to fully assessing the need for construction activity to take place. Creative reuse of facilities and the extensive use of renovations in place of new construction have been a hallmark of Connecticut College's building strategy and will continue to be emphasized as a sustainable strategy for space utilization.

### **Application of this policy:**

- For any new construction or major renovation project that has a Core Project Team (see below) this policy will automatically be in effect.
- For substantial renovations (budget over \$1 million, but without a Core Project Team), the Facilities and Land Management Committee (FLMC) project approval process will determine applicability.
- For small renovations and/or repairs (under \$1 million) this policy will be applied on a case-by-case basis as determined by Facilities Management and Office of Sustainability

### Oversight and responsibility for the policy:

## **Core Project Team:**

The Core Project Team (CPT), the primary stakeholders and decision-makers, works together to develop the scope, program, and design for new construction and major renovations. The CPT, which includes the Associate VP of Facilities Management and Campus Planning, the senior administrator(s) representing the area of focus of the project, the VP of Finance and Administration, and the project manager, will now include:

- A representative of the Office of Sustainability (staff and/or faculty)
- At least one student representative selected by SGA in coordination with the Office of Sustainability and Facilities (one primarily representing sustainability initiatives and/or one representing student body at large)

If the project includes new landscape designs or renovations:

The Arboretum Director or an Arboretum representative will be included in the core team for aspects of the project that involve the landscape and/or compliance to the Sustainable Sites Initiative.

### **Responsibilities of the Core Project Team:**

The CPT shall engage in the following activities:

- Develop budget and resource goals: including energy use reduction objectives, life-cycle resource impact, maximization of renewable energy use, and diminished carbon emissions
- Participate in all discussions during the project's programming as well as concept, schematic, and design phases
- Select project design partners and consultants who share and incorporate the College's sustainability principles
  - o Identify design concepts with significant sustainability impacts (such as site selection, building orientation, energy management, etc.)
  - o Evaluate green building certification systems to determine which is most applicable to the project (LEED, Green Globes, Living Building etc..)
  - o Work with commissioning agent throughout the project

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• Inform the College community of each project governed by this policy, specifically ensuring that plans and reports are cataloged and readily available to the entire College community

## **Accountability**

• Staff and/or faculty representative from the Office of Sustainability and Associate VP For Facilities Management and Campus Planning will ensure that these processes will be followed. The Environmental Modeling Committee (EMC) and the Facilities and Land Management Committee (FLMC) will expect regular reporting on applicable projects.

### **Measurement and Verification:**

## Overarching standard:

The College will use Leadership in Energy and Environmental Design (LEED)® protocols or their equivalent. To ensure sustainable practices are followed:

• The design must meet the minimum of LEED Building Design and Construction (LEED BD+C) Silver certification standards or equivalent for all applicable new construction and major renovations.

OR

- The design must meet the minimum of LEED Interior Design and Construction (LEED ID+C) Silver certification standards or equivalent for all applicable major interior fit-out projects.
- Project teams shall aim to exceed these standards through feasible design strategies with an overarching target of achieving a net zero campus.

## Recommended strategies toward achievement of overarching standard:

Use sustainable building guidelines, particularly focusing on, but not limited to, the following:

- Meet or exceed applicable LEED prerequisites
- Adaptive reuse of existing building or building components;
- Installation of energy efficient systems for heating, cooling, and lighting, and fully assess the use of renewable sources of energy that can be incorporated into the building plan (projects should fit into the broader campus wide energy goals and systems);
- Install submeters to record utility data and inform operational energy conservation
- Include enhanced commissioning in the project plan
- Utilize sustainable and/or locally-sourced building materials and recycled materials
- Improve indoor air quality through the use of appropriate building materials, ventilation and filtration systems, and local controls (where practical)
- Install water-conserving systems
- Strongly consider the use of bird friendly windows in window design
- Throughout the project, use life cycle cost benefit analyses to estimate environmental, societal and fiscal payback of all building components, including the following systems
  - Mechanical: heating, ventilation, and air conditioning (HVAC) equipment and controls, energy sources
  - Electrical: lighting sources and controls
  - Envelope: roofing, insulation/mass, glazing
  - Renewables: energy generation, alternative materials
  - Materials: Locally sourced and sustainably produced as per LEED guidelines

### **Sustainable Sites Initiative (SITES)**

In accordance with this policy, the College will use Sustainable Sites Initiative (SITES) standards and the College's requirements to ensure sustainable practices are followed during landscape design and construction.

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Sustainable landscape design and construction practices should particularly focus on, but not be limited to, the following:

- Landscape design and plant selection will align with the goals set forth in the Campus Master Plan and the Arboretum Living Collections Policy
- Consultation between the Core Project Team and the Arboretum Collections Committee on landscape design and plant selection.
- Landscape designs must achieve the minimum SITES qualification of "Certified" or equivalent and will strive to go beyond this requirement in order to achieve SITES qualification of "Platinum" or equivalent
- Integrate building and landscape design to work as a system and provide ecosystem services.
- Design landscapes to provide ecosystem services as specified by SITES
- Designate lay down zones for materials, dumpster locations, and construction safety zones around the buildings to prevent negative impacts on nearby flora.

## **Phases of Policy Application:**

## **Project Design Phase**

- The Core Project Team shall produce a report describing initial sustainability goals/objectives during the programming phase for buildings and landscapes.
- All requests for proposals (RFPs), including those for architects, consultants, commissioning agents, and general contractor, shall include relevant sustainable design and operations language.
- Thoroughly review any changes to sustainable features due to budget, scope or schedule constraints.
- Assess the feasibility of having a building energy model created to identify opportunities for efficiency.
- Incorporate all aspects that demonstrate how the sustainability goals/objectives will be achieved in all conceptual and schematic designs.
- Strongly consider the sustainability of enabling projects and swing spaces used during the project

### **During Construction**

- Develop a solid waste management plan that details how demolition and construction waste will be handled in a manner that emphasizes reuse, recycling and reclamation, and reduces landfill waste during the Design Development phase. As part of this plan, materials including, but not limited to, furniture, fixtures and equipment will be evaluated for reuse/donation during a mandatory walk through before the existing facilities are prepared for renovation.
- Create and use a tree and landscape protection plan that details how plants, soils, hardscapes and the surrounding environment are preserved and safeguarded during all phases of the construction plan.

#### **Project Completion and Post Occupancy**

- Include commissioning upon completion of all projects to verify efficiency of systems.
- Develop a final report detailing how the sustainability goals/objectives were met for buildings and landscapes. This report will be shared with the campus community.
- Ensure the contractor(s) submit a final waste management report indicating quantities of waste sent to landfill, recycled, reused, salvaged, and donated, along with a breakdown of materials in each category and, whenever possible, the destination of these materials.
- Incorporate meaningful ongoing monitoring of building resource use for all projects through the use of submeters, generation of on-site energy, and all other aspects pertaining to sustainability.
- Follow the <u>Sustainable Operations Practices Policy</u> for building operations and maintenance.
- Maintain landscapes following the ecological land management principles outlines in the College's Landscape Management Plan and Integrated Pest Management Plan.