San Bernardino Community District

SUSTAINABILITY PLAN

APRIL 15, 2011

Sustainability Plan

Meeting #3 (4/15/11)

- Green Building, Energy and Water

Meeting #4 (4/29/11)

- Climate
- Academic Instruction/Training

GREEN BUILDING

What is a Green Building?

Green Building

A building which:

- Is environmentally responsible and resource-efficient during its life-cycle
- Efficiently uses energy and water
- Protects occupant health and improve employee productivity
- Reduces waste and pollution.

Goals

- Create superior spaces to work and study that effectively support occupants' health, productivity, *and well-being, and are environmentally responsible.*

Key Strategies

LEED Certification (new and major renovations)

Sustainability Design Elements (Eco-Charette)

“Buildings That Teach”

- Exposure of building’s sustainability features
- Communication of sustainability features (displays, websites, dashboards)

LEED

Leadership in Energy and Environmental Design

- Voluntary, national rating system for developing sustainable buildings.
- Emphasizes strategies for sustainable site development, resource selection, energy efficiency, water savings, and indoor environmental quality.
- Ratings: Certified, Silver, Gold, Platinum
- SBCCD: Silver rating or higher.

Strategies

Sustainable Site Planning

- Placement of building and design of building envelope for optimal energy performance
- Conservation of water resources
- *Use of landscaping which has low water and maintenance requirements, helps shade buildings, and is attractive*
- *Consultation with Biology dept. on future landscaping*
- Consideration of environmental and climatic conditions (solar orientation, sun shading)

Strategies

Materials and Resources

- Selection of materials with low life-cycle costs
- Utilization of recycled, reused, *repurposed,* and rapidly renewable materials
- Development of construction waste management plan (reuse, recycle)

Strategies

Energy

- Maximization of energy efficient design (HVAC, lighting, glazing, window shading, cool roof)
- Energy efficient equipment and appliances
- Commissioning of new buildings
- Monitoring of energy use for individual buildings (building dashboards)
- *Use of similar mechanical and electrical equipment to minimize need to store multiple parts*

Strategies

Indoor Environmental Quality

- Provision/maintenance of healthy/indoor air (HVAC)
- Ensure good visual quality (daylighting)
- Limitation of VOC emitting materials
- Provision of proper acoustical conditions

Strategies

Water Resources

- Minimization of indoor water use (high-efficiency plumbing fixtures)
- Utilization of water efficient landscaping
- Utilization of wastewater technologies (metering/monitoring, captured rainwater, gray water)
- Management of stormwater (decrease runoff, capture/reuse)

OTHER STRATEGIES

Strategies

Building

- Design of interior spaces (flexible, change of use)

Water

- Monitoring of water uses (submetering buildings, audits)

Materials/Resources

- Collection of recycled materials

ENERGY

Strategies

- Measures for energy efficiency
- *Education of campus communities to be "power wise" and conserve energy*
- *Potential for scheduling of classes in limited number of buildings during summer session*
- *Implementation of* monitoring-based commissioning of existing buildings
- *Provision of* central plants/thermal energy storage
- *Provision of* renewable energy

Schedule

Spring 2011

- Vision of Sustainability Plan
- Goals
- Strategies

Summer 2011

- Development of Sustainability Plan

Fall 2011

- Draft Sustainability Plan

NEXT MEETING: APRIL 29, 2011, 3 P.M.