

I. IMPLEMENTATION

The CSU Program for Environmental Responsibility (PER) builds upon established processes within the CSU and acknowledges accepted sustainable practices. This program encourages the achievement of CSU sustainability goals through a team-based integrated development process. It is a tool for coordinating a project team to meet specific goals through “whole-building” (as opposed to “systems-based”) design.

Integrated design optimizes building performance and increases resource efficiency by capitalizing on interrelationships between building systems. The integrated design process requires shared design intent and a sustained flow of information amongst all project stakeholders. The result is a “whole-building” design in which all building systems are designed in relationship with each other. An integrated design team consists of the broadest possible set of project stakeholders. The team may include the following:

- Campus architect;
- Project manager;
- Operations and maintenance staff;
- Project stakeholders, including students, faculty, and staff;
- Campus representatives, including administrators;
- Project design team members, including project architect, designer, project manager, construction administrator, mechanical, electrical, structural, civil, landscape, and others as necessary;
- General contractor and/or construction manager;
- Community members;

This is a representative list. Stakeholders will vary from project to project and from phase to phase.

The PER Integrated Design Matrix describes the fundamental relationship between sustainability and integrated design. It maps the connections from conceptual drivers and goals, through specific design approaches (*Elements*), to building systems and team member responsibilities. By isolating a single *Element*, we can form a clear picture of how that *Element* fits into the CSU sustainability goals, and how a project team might collaborate on a solution that meets those goals.

The PER is intended to apply broadly to the full range of possible campus projects, regardless of scope. Any *Elements* that are not applicable to a project are removed from the set of potential benchmarks at the feasibility stage or other early stages of a project to create a subset of achievable goals. Projects are not penalized due to a limited scope. This allows the PER to apply to any project, whether it be a new parking lot, a utility upgrade, a minor interior finish upgrade, or a new building.

The 23 CSU campuses are located in diverse climate zones, contexts, and utility districts. In addition, they have diverse architectural styles, economic models, and infrastructures. Some *Elements* may yield significant benefits on one campus, but may be negligible or even detrimental on a different campus. Campuses should acknowledge any variance

CSU Program for Environmental Responsibility

from PER goals based on climate, established architectural style, utility service arrangements, or other constraints that may preclude consideration of specific measures. In some cases campuses may define an alternate response that is sustainable based on specific circumstances.

Each CSU campus shall establish a sustainability baseline by identifying those PER Elements that will be prerequisite for all projects on that campus. The campus baseline establishes features that apply to all campus facilities and development. Baseline features may be updated over time, but will not need to be redefined for each capital improvement. Specific baseline features will incorporate PER Elements, but may also include unique sustainable measures in place at certain campuses and innovative measures that go beyond elements of the PER.

The baseline measurement for each campus establishes a starting point for each university. The PER establishes the process for each campus to make decisions in the development and operations of future projects. Some campuses may have more baseline sustainable elements, or may benefit from the micro-climate of their geographic location. The PER encourages decisions for each project that optimizes the sustainability established by the baseline for each campus to achieve a level of sustainability commensurate with the CSU Policy. The project measurement should acknowledge any baseline items that cannot be incorporated in a specific project.

Implementation Process:

- I. Establish Campus Baseline – at earliest opportunity – master plan, feasibility or project level
 - a. Energy
 - b. Land use
 - c. Waste
 - d. Corrected for
 - i. Weather
 - ii. Location
 - iii. Occupancy
- II. Master Plan
- III. Capital Outlay Process
 - a. Feasibility Study
 - b. Project

Integrated team varies per phase.