Energy Efficiency Act

This act applies to all major facility projects that receive approval of the State Budget and Control Board - Permanent Improvement Project Request A-1 form.

All Major Facility Projects in this State, must be designed, constructed, and at least certified as receiving two globes using the Green Globes Rating System or receiving the LEED Silver standard.

Major Facility Project’ means:

- a state-funded new construction building project in which the building to be constructed is larger than ten thousand gross square feet;
- a state-funded renovation project in which the project involves more than fifty percent of the replacement value of the facility or a change in occupancy; or
- a state-funded commercial interior tenant fit-out project that is larger than seven thousand five hundred square feet of leasable area.

Projects must be analyzed using a life cycle cost analysis comparing the cost and benefits of designing, constructing, maintaining, and operating the facility at the LEED Silver standard or two globes standard, or better, with certification; normal industry and regulatory standards as applicable; or some standard between the two that causes the project to be designed and constructed in a manner that achieves the lowest thirty-year life cycle cost.

In obtaining certification as receiving two globes using the Green Globes Rating System, a major facility project must earn at least twenty percent of the available points for energy performance under 'C.1.1 Energy Consumption'.

In obtaining certification as meeting the LEED Silver standard, a major facility project must earn at least forty percent of the available points for energy performance under 'EA Credit 1: Optimize Energy Performance'.

EA Credit 1: Optimize Energy Performance

INTENT - Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

REQUIREMENTS

OPTION 1 – Whole Building Energy Simulation - (1-10pts) demonstrate % improvement in the proposed building performance rating compared to the baseline performance rating per Building Performance Rating Method in Appendix G of ASHRAE/IESNA Std 90.1-2004

OPTION 2 - Prescriptive Compliance Path - (4 pts) - For office buildings under 20,000 sf comply with the prescriptive measure of ASHRAE Advance Energy Design Guide for Small Office Buildings 2004. Identify climate zone building is located in and comply with all recommendations.

OPTION 3 - Prescriptive Compliance Path - (1 pt) - Comply with the Basic Criteria and Prescriptive Measures of the Advanced Buildings Benchmark Version 1.1. Identify climate zone bldg is located and comply with all recommendations. Design building envelope & systems to maximize energy performance.
**STRATEGIES** - Design building envelope & systems to maximize energy performance.

**REDUCE DEMAND:** Optimize building form & orientation, reduce internal loads thru shell & lighting improvements, & shift load to off-peak periods.

**HARVEST FREE ENERGY:** Use daylight, ventilation cooling, solar heating & power, wind energy, service water heating & power generation.

**INCREASE EFFICIENCY:** More efficient envelope, lighting, & appropriately sized HVAC system.

**RECOVER WASTE ENERGY:** Exhaust air energy recover, gray water heat recovery, and cogeneration.

The State Engineer's Office may waive the requirements of this item for a proposed major facility project should it determine that the costs of meeting this item are not economically feasible. The State Engineer's Office shall notify the board of the reason for the issuance of a waiver.

**Third Party Commissioning**

All major facility projects that are certified at the LEED Silver standard or higher or certified as receiving two globes using the Green Globes Rating System must be inspected by a third-party commissioning agent in the fifth, tenth, and fifteenth year following certification.

The third-party commissioning agent shall determine whether the building is operating at the standard to which it was originally designed and certified.

The third-party commissioning agent shall report its findings to the State Engineer.

If the State Engineer determines that the building is not operating within the spirit of this article, the State Engineer may take appropriate measures to bring the building into compliance.

‘Third-party commissioning agent’ means a person accredited by the USGBC or GBI, with expertise in building systems performance, who will analyze, evaluate, and confirm the proper function and performance of a high performance building, its systems, equipment, and indoor air quality, and who did not participate in the original certification of the major facility project or renovation project.