

Environmental Nature Center

Green Highlights

Newport Beach, CA

- Beginning with the North/South orientation of the building, the Environmental Nature Center (ENC) responds effectively to harvest natural daylight as well as cool ocean breezes. The breezeway which separates the staff areas from the Center also promotes additional air movement through the structure.
- Coupled with the natural daylight is a lighting control system which monitors not only the lighting requirements but the occupancy of all rooms.
- The building exceeds the nation strictest energy code, California's Title 24 requirements, by 70 percent on the exterior and 63 percent on the interior
- The South facing roof of the Nature Center accommodates a 42KW array of photovoltaic (PV) panels. The PV panels provide 95 percent of the power for the electrical needs of the ENC.
- The use of natural ventilation eliminates the need for Air Conditioning of the building.
- Drought tolerant and indigenous landscape eliminates the need for irrigation
- Storm water management treats and controls the amount of storm water runoff.
- Extensive use of recycled and recyclable materials throughout the facility. For example, the composite siding material used on the exterior of the buildings, is made of wood and plastic scraps that would have normally ended up in a landfill.
- The ENC uses green housekeeping strategies and products.

- The insulation is composed of 85-percent recycled material from denim blue jeans and 15-percent cotton fibers that are rapidly renewable resources.
- Water efficiency measures reduce the building's water use by 46 percent from a similar building. Waterless urinal, dual-flush and low-flow fixtures save an average of 15,000 gallons of portable water each year.
- More than 82 percent of the Construction waste for the project was recycled and diverted from landfills.

Solar photovoltaics installed on the roof generate 67,413 kWh of energy annually, resulting in a substantial reduction in purchased power.

Link to actual generation:

<http://view2.fatspaniel.net/PV2Web/merge?&view=PV/detail/HostedAdmin&eid=132108>

The facility will receive a LEED Platinum certification from the U.S. Green Building Council, making it the first in Orange County and the 11th in the state of California. This building exemplifies responsible environmental practices while also providing a dynamic, yet organic architectural statement.