

# An Educational Tool in Itself

The ENC has been teaching and growing within our community since 1972. Our sustainable, net-zero energy learning center provides vital classroom and educational experiences to thousands of visitors each year. Our building serves as an educational tool, showing the benefits of environmentally-conscious design. It teaches our visitors how to implement sustainable features in their own homes and businesses. The Center inspires our visitors to make personal investments in the protection of the environment.



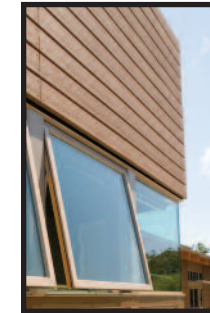
## Energy & Atmosphere

With a 42 kilowatt photovoltaic array (solar panels), the ENC produces more energy than it utilizes. A computer monitor in the hallway shows how much clean energy we are producing and the amount of carbon emissions kept from entering the atmosphere. To conserve energy, the building is equipped with lighting sensors that monitor room occupancy and available daylight. The use of natural ventilation has eliminated the need for air conditioning.



## Sustainable Sites

The use of a white-colored roof and light-colored concrete decrease the impact of heat island effect. The heat island effect occurs when natural landscapes are covered with pavement and structures. Bike racks, special parking spots for low emission vehicles and electric vehicle charging stations encourage greener transportation. A stormwater management system controls runoff and removes pollutants.



## Materials & Resources

Throughout the facility, recycled and recyclable materials have been used extensively. The building insulation is composed of 85% recycled denim blue jeans and 15% cotton fibers that are rapidly renewable resources. The outside of the building is made of wood and plastic scraps that would normally end up in a landfill. Our cabinets are made of numerous recycled materials including "wheatboard" which is composed of recycled wheat chaff. Over 82% of the construction waste was recycled and diverted from landfills. The ENC also composts and recycles on-site, and uses green cleaning products.

## Indoor Environmental Quality

The building is placed on an east-west axis to harvest natural daylight as well as cool ocean breezes. The use of low-emitting materials ensure the release of less harmful indoor air contaminants. The monitoring of CO<sub>2</sub> levels makes for a healthier indoor space.

## Water Efficiency

The use of native, drought-tolerant landscaping has eliminated the need for an irrigation system. The building has waterless urinals, dual-flush toilets and low-flow fixtures saving an estimated 15,000 gallons of potable water a year. The building's water-efficient features reduce our water use by 46% as compared to similar buildings.

LEED  
PLATINUM







## Built to Inspire

LEED, or Leadership in Energy and Environmental Design, certification is a third-party rating system led by the U.S. Green Building Council.

The ENC is the first building in Orange County to receive LEED Platinum certification, the highest level of certification.

LEED certification is recognized across the globe as the premier mark of achievement in green building. LEED-certified buildings have smaller development footprints, are healthier environments for occupants, and serve as stewards in environmental and social responsibility. LEED-certified buildings cost less to operate, reducing energy and water bills by as much as 40%. For more information visit [www.usgbc.org](http://www.usgbc.org).

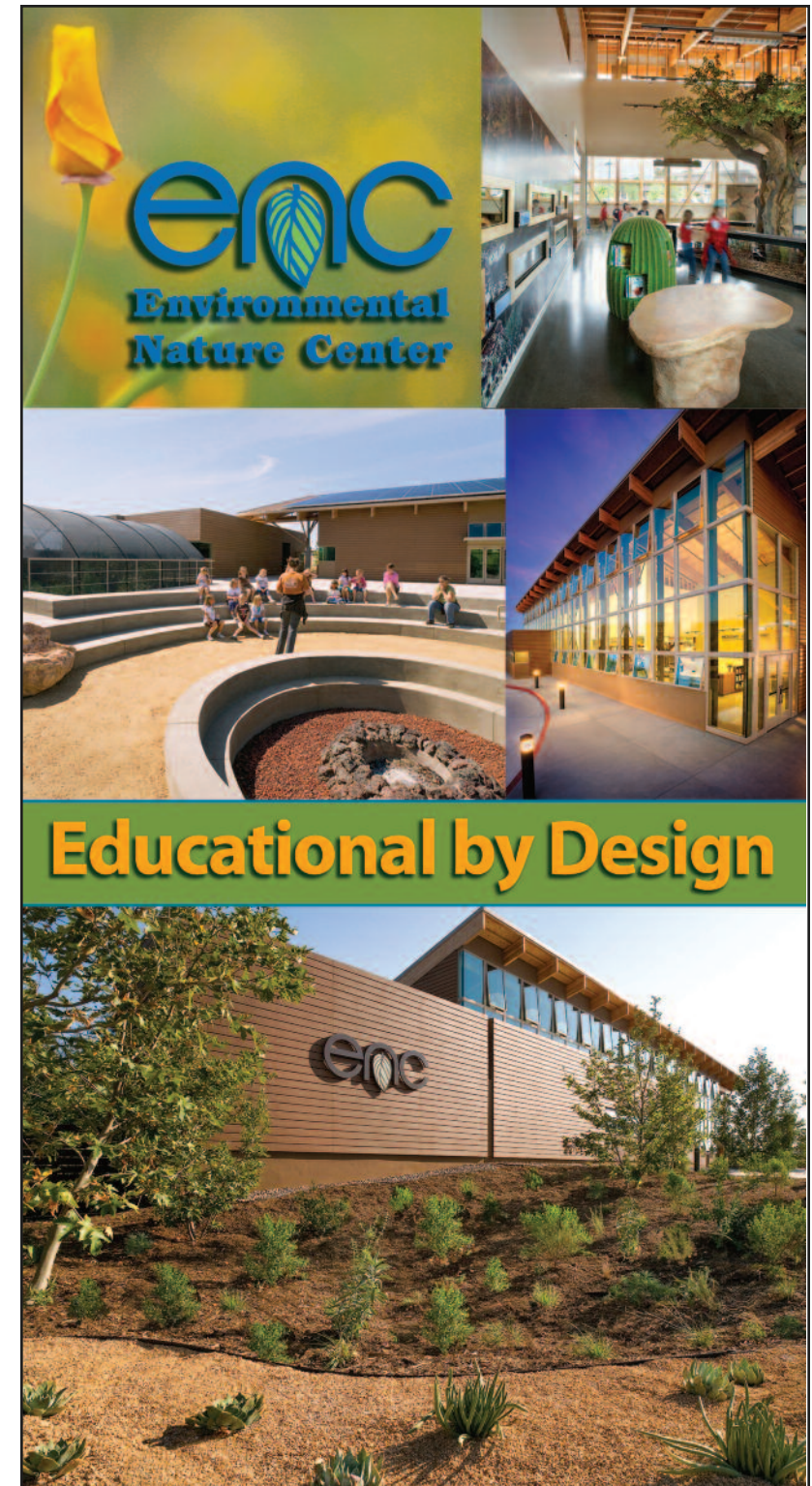
**Our Learning Center inspires thousands of children and adults each year thanks to the generosity of our donors and the creativity of our design team:**

Griffin Structures, Inc. (program management); LPA, Inc. (architect); Gentosi (general contractor); Constructive Technologies Group, Inc. (LEED consultants).



**Providing Quality Education Through Hands-on Experience with Nature**

**Environmental Nature Center**  
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**Educational by Design**