



> **Green Globes** For New Construction

VERNONIA SCHOOL INCORPORATES SUSTAINABLE PRINCIPLES TO ACHIEVE GREEN GLOBES CERTIFICATION

Halfway between the city of Portland and the Oregon coast, the town of Vernonia is nestled in a large swath of forest. In 2007 the rural community experienced its second flood in 11 years, and this time, Vernonia School was devastated. “The building was completely inundated,” recalls Aaron Miller, Superintendent/Principal at Vernonia School District 47J. “Water levels were up to five feet in portions of the school. We decided it was time to move the school to higher ground—both literally and figuratively.”

Seeing opportunity through the disaster, the community built a new 150,000-square-foot K-12 school to serve its 565 students well above the flood plain. The district deliberately incorporated sustainable measures and green technology to serve as a model for students. “We are forging a niche in education to attract families and create a viable community here,” says Miller. “The Green Globes rating system helped us evaluate our efforts, and our certification demonstrates that we honor our natural surroundings.”

Energy savings were critical. Oregon schools receive state funds based on a per-student dollar amount, and Vernonia’s location already positioned it with some of the highest electrical rates in the state. “Wherever we can cut costs helps us direct more money toward students,” notes Miller. “Although this is a much larger building than the one damaged in the flood, we decreased our energy costs by approximately 20 percent. These savings directly impact what we can do in the classroom,” he explains.

“Our Green Globes evaluation process was very smooth, and it became a critical player in showing students the value of preserving the environment.”

AARON MILLER Vernonia School District Superintendent/Principal

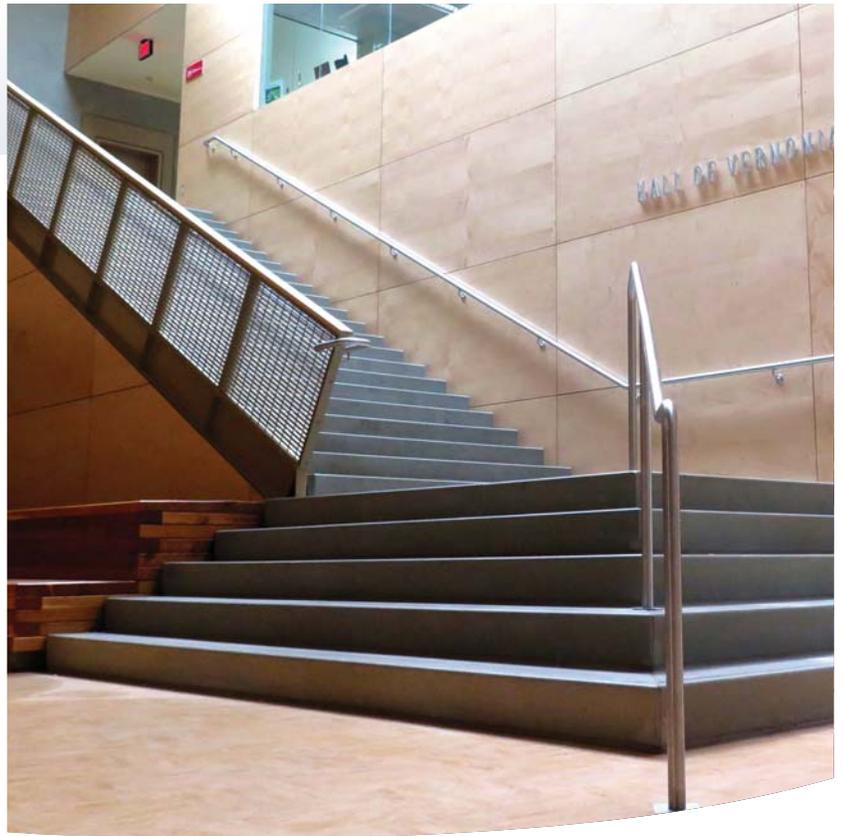


PROJECT RATING:
THREE GREEN GLOBES



RECEIVING THREE GREEN GLOBES, VERNONIA SCHOOL'S NOTEWORTHY FEATURES INCLUDE:

- Sustainability concepts woven throughout building components thanks to an echo-chambre at design concept
- Water-efficient fixtures that reduce water use by 51 percent
- Natural light infiltration through skylights and strategic window placement to boost student performance and reduce energy
- A series of bioswales that collect and treat water runoff from nearby roads and parking lots; and bioswale plus rock-bed filtration for roof stormwater runoff to protect salmon in the Nehelem River
- A biomass boiler using locally produced pellets to heat the building with renewable energy
- Photovoltaics that provide passive energy on the site



TRUE SUSTAINABILITY

The design meshed the building and its surroundings with a curriculum that looks toward future economies. For example, Vernonia School's forestry class students partnered with the local watershed council and state land management to perform wetlands mitigation on the school's new site. Recommendations from the Green Globes final report are being used as an education tool as well, helping students in the high school's new engineering program understand how the building was constructed and examine areas for future improvement.

Living in a natural resources-based economy, Miller believes it is important for students and the community to understand the environmental impacts of development decisions. "Our Green Globes evaluation process was very smooth, and it became a critical player in showing students the value of preserving the environment."

In the end, Miller says the new school created a healing atmosphere and its Three Green Globes certification gave the district a real sense of accomplishment. "We are in a place that will serve our students, growing curriculum and the environment for decades to come—this is true sustainability."

> GREEN GLOBES RATINGS

Once an assessment is verified by a third party, properties achieving a score of 35% or more receive a Green Globes rating based on the percentage of total points (up to 1,000) achieved.

85-100% (FOUR GREEN GLOBES)

Demonstrates national leadership and excellence in the practice of water, energy and environmental efficiency to reduce environmental impacts.



70-84% (THREE GREEN GLOBES)

Demonstrates leadership in applying the best practices regarding energy, water, and environmental efficiency.



55-69% (TWO GREEN GLOBES)

Demonstrates excellent progress in achieving reduction of environmental impacts and use of environmental efficiency practices.



35-54% (ONE GREEN GLOBE)

Demonstrates a commitment to environmental efficiency practices

