

Portland Community College Sustainability Achievements

October 2014



Left: Willow Creek Center earned a LEED Platinum rating due in part to its proximity to transit. Right: The historically significant 1911 Building has been renovated for use as the Southeast Campus administration offices and Community Education.

The Portland Community College \$374 million voter-approved bond program is allowing the college to increase classroom space, update equipment and technology, expand workforce training programs and renovate aging buildings.

A leading feature in this capital improvement program is the college's commitment to sustainability. PCC is dedicated to achieving a minimum LEED Silver certification for all new and renovated buildings and has achieved multiple platinum, gold and silver ratings to date.



Above: The Rock Creek Campus solar array site is "maintained" by the working farm animals from the campus Veterinarian Technology Program, further supporting the college's green goals.

Solar Projects at Portland Community College:

Rock Creek Solar Array

- 2,100-panel, 35,000 square-foot solar array
- Estimated to produce 10 million kilowatt hours (kWh) of energy and save \$1.2 million in campus energy costs in the next 25 years
- The project is a collaboration of PCC, Energy Trust of Oregon, SolarCity, SolarWorld and the Oregon Department of Energy

Willow Creek Center

- 109 kWh rooftop photovoltaic solar array

Newberg Center

- 125 kWh rooftop array
- generates a year's worth of energy

Other features at PCC campuses that promote energy-efficiency and sustainability include:

- **exposed concrete slab construction** and concrete shear walls that act as thermal mass to help maintain even indoor temperatures
- **automated lighting controls** to minimize electric light use
- **natural ventilation and cooling** including operable windows, skylights and light shelves, louvers that draw in fresh air and release hot air through roof stack ventilation turbines, window shades that block out sunlight, and ceiling fans to circulate air
- **radiant hydronic heating and cooling systems** that pump water through overhead or in-floor panels
- **heat recovery ventilators** that warm outside air by capturing heat from the building's interior common spaces when the outside temperature is below 55 degrees
- **highly insulated walls and roofs** that, with the above listed features, contribute to significantly less energy consumption than comparable buildings
- **updates to many of the older HVAC** and electrical systems to reduce energy usage
- **rainwater harvesting systems** that direct rainwater to toilets
- **lower energy-consumption dehumidification system** to transfer heat from the pool area to the water, thereby reducing the strain on the boiler system
- **reusing or repurposing** older furniture
- new furniture is **Forest Stewardship Council** certified
- new equipment is **Energy Star** certified

PCC also promotes sustainability by restoring historic structures and environmentally-sensitive areas, including:

- The restoration of the **historic Willamette Building** for the college's Downtown Center, the **former Paragon Club** on the commercial south border of the Cascade Campus and the **iconic 1911 Building** at the Southeast Campus simultaneously foster community development and create new spaces for the campuses and communities they serve.
- The restoration of the **detention pond** on the Rock Creek Campus and planting more than 47,000 seedlings to help manage storm water drainage.



Above: Ceiling fans and window blinds help regulate temperature in the Newberg Center and bring the building closer to its net-zero goal.

PCC is as committed to helping build livable communities as it is to building sustainable facilities. Conscientious land use efforts include:

Developing sites near mass transit

Proximity to mass transit lowers single-passenger auto use and creates a sense of community. PCC's Willow Creek Center adjoins TriMet's Willow Creek Transit Center with its MAX Light Rail service, while the purchase of the college's Downtown Center was greatly influenced by its strategic location near many modes of transit.

Conserving space and promoting neighborhood cohesiveness

At Cascade Campus the new academic building, Cascade Hall, and Student Union are constructed above an underground parking facility.

Incorporating commercial space into the design of new buildings

Willow Creek Center and the new Southeast Campus Student Commons and Library include active ground floor retail opportunities to help catalyze healthy community development in surrounding neighborhoods and business districts.

CONTACT INFORMATION

For more information on the PCC Bond Program
Visit bond.pcc.edu or call the Helpline at (971) 722-8454