

The ESF Gateway Building



Demonstrating Our Commitment to Sustainability

Located just to the west of Moon Library on the SUNY-ESF campus in Syracuse, the College's new Gateway Building will provide a stunning first impression to campus visitors, produce renewable energy for several campus buildings, and fulfill a variety of student and community needs. Built to meet the highest LEED Platinum building standards, this facility will demonstrate ESF's commitment to environmental sustainability and provide a showcase for a variety of "green" technologies.

The main (entry-level) floor will feature:

- A Conference and Event Center with three divisible spaces and seating for up to 500 people
- A new and larger location for ESF's College Bookstore
- An Exhibition Gallery displaying the College's Roosevelt Wild Life Collection and other exhibits
- A new College Cafeteria/Snack Bar with table seating provided in an adjacent south concourse

A second (upper-level) floor will feature:

- A sustainable green roof made from plantings native to Central New York, with a walk-out observation deck overlooking the remarkable hills and valleys to the west
- Roof-mounted photovoltaic and solar thermal systems to provide electricity and hot water
- Conference rooms and offices for ESF Outreach and the Office of Undergraduate Admissions

A third (lower-level) floor will feature:

- A Combined Heat and Power (CHP) System designed to produce steam heat and electric power for the Gateway Building and four additional academic buildings, meeting up to 65 percent of ESF's campus heating needs and 20 percent of its electrical needs (additional details below)
- A Fitness Center serving ESF students, faculty, staff and alumni, and providing improved training facilities for our intercollegiate athletic teams

Sustainable "Green Building" Components

The ESF Gateway Building will showcase a unique combination of renewable energy systems and green building design. This building is expected to achieve a LEED Platinum level of sustainability while reducing ESF's campus energy costs, fossil fuel dependence, and carbon footprint. Some of the significant "green building" components of the facility include:

- A Combined Heat and Power System using a wood pellet-fueled boiler connected to a steam turbine to produce heat and electricity during the coldest months of each year. This thermal rich biomass system will be coupled with a second CHP system using three microturbines fueled with natural gas and biodiesel to produce additional heat and electricity on a year-round basis
- A vegetated "green" roof with soil depths of 8 to 16 inches to provide insulation and manage storm water runoff
- Natural ventilation and radiant floor heating, energy efficient windows and metal-clad exterior
- Sophisticated environmental monitoring systems and controls
- Roof-mounted photovoltaic and solar thermal systems to produce renewable energy
- Rain gardens to manage storm water runoff
- Significant use of natural wood and recycled building materials
- Projected energy consumption at 37.5 KBtu/square foot (75 percent less than older campus buildings)

