



DESIGNED TO EARN THE ENERGY STAR

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.

The Department of Energy's National Renewable Energy Laboratory moves into its new 222,000 SF Research Support Facility (RSF) in June of 2010. The RSF, which is pursuing LEED-NC Platinum certification, will be the largest completed office building designed to meet net zero energy in North America. This building is meant to further the DOE's goal of making net zero energy commercial buildings viable by 2025 and make the building a replicable prototype for this future.

Project: NREL Research Support Facility

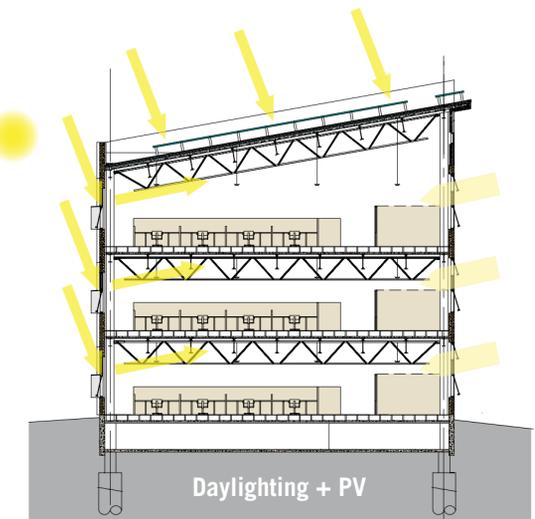
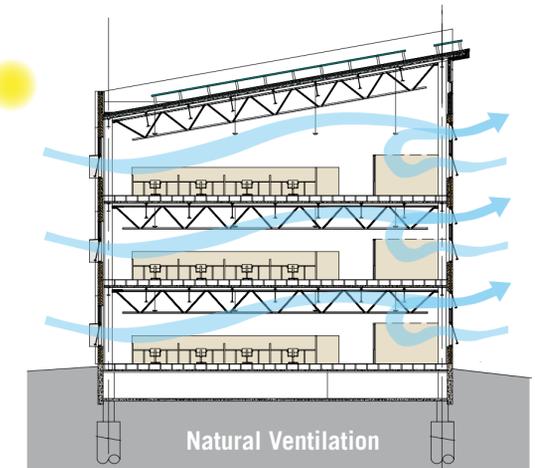
- * Energy Use Intensity (EUI) = 97 kBtu/sf/yr
- * Percent CO2 reduction = 67%
- * ENERGY STAR design rating = 99

Annual Savings Statistics (compared to an average building EPA rating of 50)

- * Energy savings = 43,190,000 kBtu
- * CO2 savings = 3,200 Metric Tons CO2

Net Zero Energy Strategies

- Building Orientation
- Thermal Labyrinth
- Night Purge and Building Thermal Mass
- Transpired Solar Collectors
- Daylighting
- Passive Solar Control
- Natural Ventilation
- Under Floor Ventilation
- Radiant Cooling and Heating
- Waste Heat Recovery
- Triple-Pane Glazing
- Workplace Design for Low Energy
- 1.6MW On-Site Photovoltaic System



U.S. Department of Energy
 National Renewable Energy Laboratory
Research Support Facility
 Golden, Colorado

