U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

LEED Apartment Building – New York B-Roll

Scene-by-Scene Description

Get the facts behind the footage available on the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) B-Roll Web site at **eere.energy.gov/news/b_roll.cfm**.

Video Title: LEED Platinum-Certified Apartment Building B-Roll
Video Only/No Audio
Location: The Bronx, New York City, New York
Shoot Date: March 28, 2010
Total Running Time: 5:54

Scene 1: 00:05: Building exteriors display ENERGY STAR® and LEED plaques. As a result of collaboration with private industry, governments, and consumers, the ENERGY STAR program was established in 1992 to identify energy-efficient products and reduce carbon emissions. Leadership in Energy & Environmental Design (LEED) credits are awarded on a 100-point scale; Platinum-certified buildings such as this one earn 80 points or higher based on their environmental impact.

Scene 2: 00:46: Ten 1-kilowatt (kW) rooftop wind turbines. Small wind electric systems are one of the most cost-effective residential renewable energy systems.

Scene 3: 01:32: Two 5-kW micro combined heat and power (CHP) units, which generate electricity near locations where waste heat can be put to use by warming the building.

Scene 4: 02:07: Variable frequency drive pumps, which change heat output based on need.

Scene 5: 02:22: 90% to 99%-efficient sealed-combustion condensing natural gas boilers. These furnaces bring outside air directly into the burner and exhaust flue gases (combustion products) directly to the outside, preventing waste of the energy used to heat the air.

Scene 7: 02:52: Computerized boiler system modulating hot water temperature based on outdoor temperature; a thermal-wrapped hot water tank.

Scene 8: 03:25: Recycled and low-VOC materials used for interior carpeting, flooring, countertops, and paint. Volatile organic compounds (VOCs) are organic chemical compounds often found in building materials that can have an adverse effect on the environment and human health.

Scene 9: 04:45: The residence's many energy-saving features, including low-flow bathroom fixtures, a programmable thermostat, ENERGY STAR appliances, and energy-efficient compact fluorescent and LED lighting.

Learn More about Energy Efficient Buildings

Developed by the U.S. Green Building Council (USGBC), the LEED green building certification program uses a rating system to recognize commercial and residential projects that implement strategies for improved energy, environment, and heath design. This system encourages and accelerates the global adoption of sustainable building and development practices.

LEED-certified buildings improve design across a set of critical metrics for energy efficiency, including: energy savings, water efficiency, greenhouse gas emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. Certified buildings can qualify for tax rebates, zoning allowances, and other incentives, thus rewarding developers and owners who demonstrate a commitment to environmental responsibility.

DOE supports the development of technologies, techniques, and tools for making both residential and commercial buildings more energy-efficient, productive, and cost-effective through the EERE Building Technologies Program. More information about this program and its multi-year plan to reduce energy consumption and costs can be found at **eere.energy.gov/buildings**.