

BUILDING PERFORMANCE LAB

CUNY INSTITUTE FOR URBAN SYSTEMS

CITY UNIVERSITY OF NEW YORK

Robert E. Paaswell, President, CCNY (Executive Director, CIUS, on leave)
 Richard E. Hanley, Acting Director, CIUS
 Michael Bobker, Director, Building Performance Lab

Newman Hall, 137 E. 22nd St., Room 315
 New York, NY 10010
www.cunyurbansystems.org

Category	Low-hanging fruit	Deeper savings	Extensive savings
Energy use	Submetering Modifying building occupant behavior Shutdown or standby computers Energy Star Products	Cool roofs Perimeter shade areas via canopies and vegetation Bicycle storage and changing rooms	Solar power Grid buybacks (net metering) Green roofs Chiller upgrades, or reduce toxic leakage in old equipment
Illumination	Compact Fluorescents (CFLs) in task lighting Controls Daylighting	Overhead fluorescents Window treatments	Time and motion sensors Reduction of extra exterior light and night lighting
Indoor Air Quality	CO testing Volatile Organic Compound (VOC) reduction Mold reduction Non-toxic cleaning products Isolation of chemicals	Mechanical ventilation Optimize fresh air intake locations (away from traffic, loading docks, garages, sanitation areas, smoking areas, exhaust fans)	Sensors and alarms for temperature, humidity and CO2
Thermal comfort	Basic Envelope integrity / airsealing, including window frames and door jambs Duct leaks, dirt, obstructions	Window treatments Insulation Programmable thermostats	Window replacement Individual controls by room Furnace upgrades
Waste and recycling	Paper reuse Additional recycling stations Increased publicity toward occupants Toxic material source reduction	Salvaged materials Recycling haulers	Waste stream audit Modular designs
Water usage	Reduction Leaks Water filters	Green roofs Ultra-low-flow fixtures Dual-flush toilets	Sink / toilet occupancy sensors Non-water urinals Stormwater reuse