Daylight Optimization & Lighting Controls

Approximately 1/3 of our electricity consumption at NYHQ is used for lighting. The Engineering department installed controls known as occupancy sensors and photocells to reduce our energy use.

Photocells turn off electric lighting in areas where large amounts of natural daylight are present. Photocells use light sensitive cells similar to solar panels to detect sunlight. When a prescribed amount of natural light is available, they turn off electric lighting in the area. Using the sun's light to offset interior lighting requirements saves energy and provides a more comfortable environment.

Occupancy sensors turn lights on and off as people enter and exit rooms. Lights are often left on when offices, break rooms, storerooms, and rest rooms are unoccupied. Occupancy sensors use infrared technology to sense movement, and they will turn off lights after a set amount of time with no movement. According to industry estimates up to a 60% savings in energy consumption may be achieved with the use of occupancy sensors.

At NYHQ, approximately 150 light fixtures were outfitted with these controls. They save 48,000-kilowatt hours of electricity per year. That is a reduction of 74,000 lbs of carbon emissions per year and is equal to taking 6 passenger cars off the road. While the annual financial savings only amount to $8,000, it still contributes to a reduction of expenses and helps to make our buildings greener. The installation costs were $9,600 and were paid for by the savings in just 1.2 years.