



Énergie NB Power

Hotels and motels

Energy consumption generates greenhouse gases (GHG) and accounts for a significant business expense. By implementing energy efficiency measures and practices, businesses get more value from the energy they purchase while lessening their impact on the environment. Many opportunities exist for hotels and motels to decrease energy consumption and realize cost savings. The energy efficiency measures listed include recommendations for upgrades that can improve aesthetics, enhance guest experience and lower maintenance costs. All of these measures should be evaluated for each individual building first by a professional and a comprehensive energy audit may be beneficial.

Typical energy efficiency measures

Hot Water

- Inspect for water leaks and repair them. Ignoring such simple maintenance measures is costly since leaks tend to get worse with time and more expensive to fix.
- Install high-quality, low-flow shower heads. Models with adjustable spray patterns are best as they communicate to guests that management cares about comfort as well as energy and water conservation.
- Consider installing multiple boilers. These provide redundancy and can be staged in a way that more efficiently manages loads, compared with a single large machine.
- Use heat recovery from waste water to preheat hot water.

HVAC

- Install occupancy controls for lighting and HVAC in guest rooms.
- Consider heat-pump water heaters for indoor swimming pools to simultaneously heat water and provide dehumidification.
- Install demand ventilation controlled by air quality sensors in public spaces from lobbies and dining rooms to parking garages.
- Downsize to a new high-efficiency chiller in conjunction with lighting retrofits.
- Choose high-efficiency packaged A/C units.
- Use condensing boilers with large turn-down ratios whose efficiencies improve with turn-down.
- Switch over to direct digital controls.
- Install premium-efficiency motors.
- Verify economizer function and control.
- Consider using cool air from the cooling tower with water-cooled chillers.
- Consider indirect-direct evaporative cooling.
- Upgrade the energy management system; optimize settings to reflect usage, respond to changing weather patterns, and control peak electric loads.

Building Envelope

- Install high-efficiency glazing carefully chosen for sun exposure and other variables on each facade.
- Install insulation in basement walls and roof.
- Undertake air sealing, including duct work.



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Plug Loads

- Choose energy efficient ENERGY STAR appliances throughout the facility. Mini-refrigerators placed in guest rooms are notoriously energy wasteful, but ENERGY STAR models are now available.
- Choose energy efficient office equipment.
- Install Vending Misers on vending machines.
- Install ENERGY STAR commercial refrigerators and water coolers.

Combined Heat and Power (CHP) System

- Install a combined heat and power system to supply electricity, heating needs, and (through an absorption chiller) cooling needs. When properly sized and designed, such a system can save substantial money and avoid the large thermal losses associated with conventional power generation at utility plants.

Lighting

- Compact fluorescent lights (CFLs)
 - Use 75% less energy than standard incandescent bulbs to produce the same amount of light and last up to 10 times longer
 - Ideal to use in hard-to-reach places, in guest rooms and where lights are left on for long periods of time
- High Performance T8 fluorescent lamps
 - Use 15% less energy than standard T8 systems
 - Better colour rendering up to 25 years
 - Maintain light output for longer periods of time
 - Longer lamp lifespan
- Holiday LED strings
 - Use 90% less energy than conventional incandescent light strings and last at least 10 times longer
 - More durable and produce very little heat
- LED or photoluminescent exit signs
 - Extremely long product life: LEDs last 10 to 15 years
- Lighting occupancy sensors
 - Depending on the room, savings can be up to 70%
 - Extends the life of lighting products and reduce maintenance costs

Financial incentives available

NB Power's *Energy Smart Commercial Buildings Retrofit Program* provides financial incentives of up to \$3,000 towards an evaluation to determine the potential for energy efficiency upgrades and a maximum of \$75,000 towards the energy retrofitting project costs. For more information about making your store more energy efficient visit www.nbpower.com or phone 1-800-663-6272 and press 5 for Energy Efficiency Services (after choosing your preferred language).