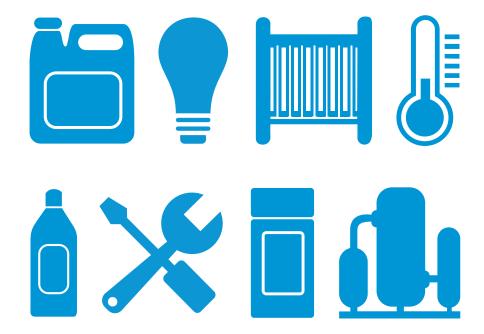






Is It Time to Upgrade?

6 Surprising Ways to Reduce Your Pool's Energy Costs



Introduction



For property managers and committee board members, investing in the right pool equipment can be overwhelming. However, saving energy and making maintenance more efficient can be achieved with many pieces of equipment, including heaters, filters, variable speed motors and pumps, lighting, chemical automation, ventilation and proper equipment maintenance.



According to the Illinois Smart Energy
Design Assistance Center, pool heating
accounts for 62 percent of the energy
used in an outdoor pool and 21 percent
in indoor pools. Meanwhile, pumps use
21 percent of an outdoor pool's energy
and 13 percent of an indoor pool's. These
expenses may be lowered if existing
equipment is replaced with energy-saving
options. Although upgrades like these have
a high initial cost, they can eventually pay
for themselves and save your property
money in the end.



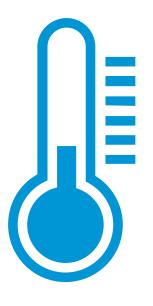
Heat

There are many energy-saving pool heating options, from electric heat pumps to geothermal. Installing and properly maintaining the right heater will help you save on energy costs.

Gas heaters rely on fluctuating market prices, so it is harder to maintain or predict costs. However, a high-efficiency Hayward heater can provide energy savings of up to 18 percent.

Electric heat pumps can be a great choice for facilities that only use electrical power. The U.S. Department of Energy pointed out that although these efficient units have higher upfront costs, they typically have lower annual operating costs. In the long run, they can help you save money.

Natural energy sources, such as solar and geothermal heat, have been growing in popularity. These systems use the heat from the sun or the ground to raise the temperature of the pool water. The effectiveness of these devices depends on location, climate and weather changes. However, if installed in an optimal location, they can help cut costs by reducing the need for electric or gas heaters.





- 1. A high-efficiency heater can provide energy savings up to 18%.
- 2. Electric heat pumps can have a higher initial cost, but have lower operating costs.
- 3. Solar and geothermal heating systems can reduce the need for electric or gas heaters.

Light



Light-emitting diode (LED) lighting has been a popular energy-saving option for many years, and many pools have taken advantage of this technology. According to HowStuffWorks, LED lights cost more than incandescent bulbs and can last up to a decade. Pentair LED lights use 86 percent less electricity than incandescent and halogen pool lights, and Hayward bulbs boast energy savings of 84 percent over incandescent lighting.

A U.S. Department of Energy study found that LED lighting is the most environmentally friendly form of lighting. Investing in LED lights means you can leave the lights on longer without worrying about the bill and the lights themselves will require less maintenance.

LED lights also come in a variety of colors, giving facilities creative lighting options. Additionally, you may consider changing the light fixture itself as part of the upgrade. You would not want a worn gasket or old fixture to leak and damage a new bulb.

- 1. LED lights use up to 86% less electricity than regular pool lights.
- 2. LED lights can last up to a decade.
- 3. LED lighting is the most environmentally friendly form of pool lighting.



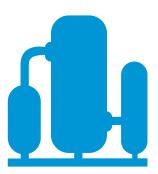
Automate

A chemical automation system helps eliminate guesswork and chemical waste. It does this by giving the pool a level dosage of the sanitizers it needs to kill algae and bacteria. A normal pool can experience many "peaks and valleys" in regards to chemical balance throughout the season, due to variables like weather and swimmer activity. An automation system helps check the water's chemical readings, analyze the necessary treatment and administer chemicals to keep your water balanced. However, automation still requires supervision from a pool professional. Additional water analysis will ensure chemical records are correct and that the system is working properly. Hayward offers automation systems with wireless controls, which can be adjusted via computer or smartphone.

The U.S. Occupational Safety and Health Administration (OSHA) mandates that only trained individuals wearing the proper safety equipment can handle chemicals. Balancing the chemicals in pool water is not only a delicate art – it requires certification and a great deal of knowledge.

- 1. Automation helps your pool maintain a level chemical balance.
- 2. An automation system can wirelessly connect with a computer or smartphone.

Pump



The pump is responsible for moving your pool's water through the filtration system. First, it pushes water through a screen and filter to trap all debris and small particles, then it pushes the water back out to the pool. This water movement also ensures that chemicals disperse evenly.



Variable speed pumps and motors may be a great way to save money and energy. Hayward and Pentair sell Energy Starcertified variable speed pumps that will pay themselves off and save money in the long run. In fact, a Hayward variable speed pump can save up to 90 percent on pump-related energy costs. Variable speed controls enable professionals to adjust the pump speed while maintaining proper flow rate. This allows the device to continue doing its essential work without unnecessary energy drainage.

- 1. Variable speed pumps can save energy while maintaining proper water flow.
- 2. A variable speed pump can save up to 90% on pump-related energy costs.







Invest

Facilities looking to save on energy costs should consider investing in pool equipment upgrades. There are many areas where money can be saved, if the right equipment is installed and properly maintained. The variety of options available gives property managers and committee board members plenty to choose from, in a range of prices. Making a facility energy efficient does not have to mean spending a fortune. Even small changes can have a long-lasting effect.

- 1. Heating accounts for 62% of all energy used in outdoor pools.
- 2. Pumps account for 21% of an outdoor pool's energy consumption.
- 3. There are many areas where money can be saved.
- 4. Even small upgrades can have a long-lasting effect.

Get the Right Advice

One of the most important parts of any equipment assessment is getting the right advice. Every pool is unique – from structure to number of daily swimmers to local code requirements. Each unique quality is part of a larger equation that helps you calculate the best investments for your pool. By getting the right advice, you will be empowered to make the right decisions about your pool equipment. There may be savings in your future, so talk to your local pool company today.

For 30 years, American Pool has provided advice to property managers and community boards around the country. As a full-service company, we offer pool maintenance, renovation, repair, construction and lifeguard management all under one roof.

True professionals know the importance of investing in pool equipment the right way. This means only executing upgrades that will make a positive impact on your pool. These upgrades may improve anything from swimmer experience to budget efficiency.

Have a question or need service? Just ask. Take the first step toward making your pool more efficient, budget-friendly and safe with American Pool. General advice and estimates are always free!



Live safely. Play freely.

Sources

http://www.hayward-commercial-pool.com/ctg/Heaters_10201_10055_-1_400779_C.htm

http://smartenergy. illinois.edu/pdf/Pool%20Niche%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20FINAL%20-%2005.02.2011.pdf/Pool%20Market%20Report%20Market%20Report%20FINAL%20-%20Market%20Market%20Report%20FINAL%20-%20Market%20Marke

http://science.howstuffworks.com/environmental/green-tech/sustainable/led-light-bulb3.htm

http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2012_led_lca-pt2.pdf

https://www.osha.gov/Publications/osha3084.html

http://www.pentairpool.com/staging/newsite/pool-owner/products/automation-intellichem-chemical-controller-435.htm

http://www.hayward-commercial-pool.com/prd/Controls-Chemical-Automation-CAT-5000_10201_10055_1016764_-1_400632__C.htm

http://www.hayward-commercial-pool.com/prd/Pumps-EcoStar-C_10201_10055_1020925_-1_400638__C.htm

http://www.hayward-commercial-pool.com/ctg/Pumps_10201_10055_-1_400638_C.htm

http://home.howstuffworks.com/swimming-pool-pumps-run-all-the-time.htm

 $http://www.hayward-commercial-pool.com/prd/Lighting-LED-Universal-CrystaLogic_10201_10055_1026091_-1_401350_26001_400634.htm$

http://www.pentaircommercial.com/products/lighting-white-intellibrite-5g-white-led-pool-lights-387.htm

http://energy.gov/energysaver/articles/heat-pump-swimming-pool-heaters