



Winter Pool Heating Guide: How to Save Money With a Simple Bubble Cover

Provided by: Unique Companies

Purpose: Keep your pool comfortable in winter while minimizing energy costs.

Why pools lose heat at night (and why covers matter)

Most heat loss from a pool happens through **evaporation**—when water molecules leave the surface, they carry heat with them. The U.S. Department of Energy notes evaporation is the **largest source of energy loss** for swimming pools. [The Department of Energy's Energy.gov](#)

A pool cover acts like a “lid” that dramatically reduces evaporation and blocks wind across the water surface. DOE states that **covering a pool when it is not in use is the single most effective way to reduce pool heating costs**, with **50%–70% savings possible**. [The Department of Energy's Energy.gov](#)

Bottom line: If you want the most efficient winter pool heating plan, the cover is step one.

The easiest, most cost-effective option: Bubble (solar) covers ***purchase on Amazon**

One of the lowest-cost purpose-built covers is the **bubble (solar) cover**—it floats directly on the water and acts as a vapor barrier. [The Department of Energy's Energy.gov](#)

Benefits you can expect:

- **Lower heating costs** by reducing nighttime heat loss (DOE notes **50%–70% savings are possible**). [The Department of Energy's Energy.gov](#)
 - **Less evaporation** (EPA notes covers can prevent **up to 95%** of pool water evaporation). [US EPA](#)
 - **Less chemical loss and less debris** (DOE also notes reduced chemical use and cleaning time). [The Department of Energy's Energy.gov](#)
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How to use a bubble cover correctly (best practices)

1) Put the cover on any time the pool is not being used.

The savings come from consistency—especially overnight. DOE specifically recommends covering when not in use. [The Department of Energy's Energy.gov](https://www.energy.gov)

2) Make sure it fits the water surface well.

- Buy the closest size larger than your pool and **trim to fit** (most covers are designed to be trimmed).
- The goal is maximum contact with the water surface and minimal gaps.

3) Use a reel system if possible.

A reel makes daily use realistic—if it's hard to handle, people stop using it (and savings disappear). DOE notes ease of use matters because “a cover doesn't save any energy if you never use it.” [The Department of Energy's Energy.gov](https://www.energy.gov)

4) Cover orientation:

Typically, the **bubble side goes down on the water** (follow your specific cover's instructions).

5) Safety note (important):

- A bubble/solar cover is **not a safety cover** and should not be walked on or relied upon to prevent drowning.
- If you need a true safety solution, ask us about safety-cover options.

Winter heating strategy: Gas heater vs. heat pump (how to run each efficiently)

Option A: Heat Pump (best for maintaining temperature efficiently)

Heat pumps move heat from outdoor air into the water. DOE notes heat pumps are **most efficient when outdoor air is above ~50°F** and lose efficiency as air temperatures drop. [The Department of Energy's Energy.gov](https://www.energy.gov)

Best practice approach:

- **Use a cover daily** (especially overnight) so the heat pump is maintaining, not constantly rebuilding heat loss. [The Department of Energy's Energy.gov+1](https://www.energy.gov)
- **Hold a steady setpoint** during your winter swim season rather than large up/down swings (this supports stable performance and comfort).

- In colder snaps (especially below ~45–50°F), expect slower heating and higher operating cost per degree of heat delivered. [The Department of Energy's Energy.gov](#)

Option B: Gas heater (best for quick heat / occasional use)

DOE notes gas heaters are **ideal for quickly heating pools**, making them a good choice for pools used periodically, and they can maintain desired temperatures regardless of weather. [The Department of Energy's Energy.gov](#)

Best practice approach:

- Use the **bubble cover nightly** so you don't "buy the same heat twice." [The Department of Energy's Energy.gov](#)
- If you only swim on weekends, you can "heat for the event" rather than keeping a high temp all week (cover still matters every night).

Setpoint guidance: what temperature should you choose?

DOE notes typical pool temperatures range **78–82°F** and highlights that **each 1°F increase can cost ~10%–30% more in energy**, depending on location. [The Department of Energy's Energy.gov](#)

Practical recommendation:

- If you want the most efficient comfort: consider **78–80°F** as a starting point.
- If you raise your setpoint, do it intentionally—each degree can be a meaningful cost increase. [The Department of Energy's Energy.gov](#)

The “don't waste money” checklist (high-impact habits)

- **Cover the pool every night** (primary savings driver). [The Department of Energy's Energy.gov](#)
- **Turn the heater down or off when the pool won't be used for several days.** DOE notes it's a myth that reheating always costs more than you save by turning it down/off. [The Department of Energy's Energy.gov](#)
- **Reduce wind exposure** where practical (wind increases evaporation and heat loss). DOE notes wind speed increases evaporation; windbreaks can help if designed appropriately. [The Department of Energy's Energy.gov](#)

- **Keep water chemistry balanced and filters clean** (improves heater performance and protects equipment).
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Quick FAQ

Does a cover only help in summer?

No. Covers help anytime the pool is warmer than the air—especially at night—because they reduce evaporation (the biggest heat-loss mechanism). [The Department of Energy's Energy.gov](#)

Is a bubble cover “worth it”?

DOE indicates savings of **50%–70% are possible** when covering the pool when not in use, making it one of the best ROI upgrades for heated pools. [The Department of Energy's Energy.gov](#)

Will a cover help with water use too?

Yes—EPA notes a pool cover can prevent **up to 95% of pool water evaporation**.

WANT TO RESEARCH & LEARN MORE???

Credible references for understanding pool heating

- **U.S. Department of Energy (Energy Saver) – Swimming Pool Covers**
Explains that evaporation is the largest source of pool heat loss and that **covering a pool when not in use is the single most effective way to reduce heating costs, with 50%–70% savings possible**. [The Department of Energy's Energy.gov](#)
- **U.S. EPA (WaterSense) – Pool Water Efficiency / Pool Covers**
Notes that pool covers can **prevent up to 95% of pool water evaporation**, and that consistent use contributes to **water, energy, and cost savings**. [US EPA](#)
- **Building America Solution Center (PNNL) – Water Savings in Pools and Spas**
States that a cover can **reduce heating bills up to 50% by preventing night heat loss** (and also helps reduce water loss and chemical use). [Building America Solution Center](#)
- **U.S. Department of Energy – Heat Pump Swimming Pool Heaters**
Confirms heat pumps are **most efficient when outdoor air is above ~50°F** and lose efficiency as air temperatures drop; also includes cost tables showing large cost reductions when used **with a pool cover**. [The Department of Energy's Energy.gov](#)

- **U.S. Department of Energy – Managing Swimming Pool Temperature**
Notes pool temps often range **78–82°F**, that **each degree higher can cost ~10%–30% more**, and recommends **turning the temperature down or turning off the heater** when the pool won't be used for several days (and that it's a myth that reheating always costs more than you save). [The Department of Energy's Energy.gov](#)