

18 Things to Do Immediately to Reduce Your Home Energy and Maintenance Costs

1. Check the insulation in your attic – and install more if needed.

If you have an unfinished attic, pop your head up there and take a look around. You should see insulation up there between the beams, and there should be at least six inches of it everywhere (more if you live in the northern part of the United States). If there's inadequate insulation up there – or the insulation you have appears to be damaged – install new insulation.

2. Lower the temperature on your hot water heater down to 120 degrees Fahrenheit.

This is the optimum temperature for your hot water heater. Most people don't use water hotter than 120 degrees — indeed, water hotter than that can scald you or a child — and thus the energy needed to keep the water above 120 degrees isn't used effectively. Lower the temperature, save money on your energy bill, and you'll never skip a beat.

3. Toss a water heater blanket over that hot water heater as well.

While most modern hot water heaters are well-insulated, some are insulated better than others, and many older heaters aren't insulated well at all. A small investment in a blanket for your water heater will slowly and gradually save you money on your heating bill over time by keeping the heat in the water instead of letting it disperse slowly into your basement or utility closet.

The Department of Energy recommends being "careful not to cover the water heater's top, bottom, thermostat, or burner compartment." And of course, on-demand (or "tank-less") water heaters don't require this treatment.

4. Install ceiling fans in most rooms.

Ceiling fans are a low-energy way to keep air moving in your home. Because of the air circulation effect, you can get away with keeping your thermostat a degree or two higher in summer and a degree or two lower in winter, netting a rather large savings. The most important thing to know is that the air directly below the fan should be blowing *down* on you in the summer and should be pulled upwards away from you in the winter — you can use the reversal switch on your fan to switch between the modes at the start of each season.

5. Wrap exposed water pipes with insulation.

Exposed hot water pipes lose heat as they move water from your heater to your faucet or shower. Wrapping them in pipe insulation, especially in cold basements or garages, can make a two- to four-degree difference in the temperature of the water, and also allows hot water to reach your faucet faster.

Check the pipes into and out of your hot water heater first, as the first three feet out of the heater (and the last few feet of inlet water) are key. Use good-quality pipe insulation for the job, which is actually quite simple.

6. Install a programmable thermostat – and learn how to use it.

A programmable thermostat allows you to schedule automatic increases and decreases in your home's temperature, saving money on cooling in the summer and heating in the winter.

They're easy to install and easy to use, especially if you keep a fairly routine schedule. Just program the thermostat to drop a few degrees at night while you're sleeping or off at work during the day, and set it to return to your preferred temperature just before you wake up or return home from work. You won't notice the difference — until you see your lower utility bill.

7. Replace your air filters.

When you first move in, you almost always need to replace the air handling filter or the filter on your furnace or AC unit. Don't worry, it's easy to do – it takes about 10 seconds.

Go down to your air handling unit, find where the filter is (it's almost always a large rectangle), and mark down the measurements (printed around the edges). Then, go to the hardware store and pick up a few of them. Go home and replace the old one with a new filter, and save the rest so you always have a clean one ready to go. An outdated filter not only doesn't filter air as well, it also has a negative impact on air flow, meaning your air handling system or HVAC unit has to work harder — and use more energy — to pump out lower quality air.

8. Make sure the vents in all rooms are clear of dust and obstructions.

None of the vents in your home should be covered or blocked by anything – doing that makes your heating and cooling work overtime. You should also peek into all of your vents and make sure they're as dust-free as possible, and brush them out if you see any dust bunnies. This improves air flow into the room, reducing the amount of blowing that needs to happen.

9. Mark any cracks in the basement with dated masking tape.

Many homes have a few small cracks in their basement walls from the settling of the foundation and the weight of the house. In a stable home, the small cracks aren't growing at all – they're safe. If they're growing, however, you'll save a *ton* of money by getting the problem addressed *now* rather than later.

How do you tell if they're growing? Take some masking tape and cover up the end of any cracks you notice inside or outside, and write today's date on the tape. Then, in a few months, check the tape – if you see a crack growing out of the end of the tape, you might have a problem and should call a specialist before the problem gets out of hand.

10. Hang a clothes rack in your laundry room or an outdoor clothesline).

Even an efficient clothes dryer can really eat up your energy costs, but it's convenient for many people. If you're willing to battle that convenience, you can save money by hanging a clothes rack from the wall in the laundry room and using it for some items; t-shirts, underwear, towels, and pillow cases dry great on clothes racks. If you can hang up 20% of the clothes in a load on a rack, you can get away with running the dryer 20% less than before, saving you cash. Even better: If you can, install a clothesline in your back yard and hang most of your clothes to dry outside, where a good breeze can do the work of a dryer in no time — and at no cost.

11. Check all toilets and under-sink plumbing for leaks or constant running – and check faucets, too.

Do a survey of the plumbing in your home before you settle in. If you find a toilet is running constantly, it's going to cost you money – here's how to easily fix that constantly-running toilet. You should also peek under the basin of all the sinks in your home, just to make sure there aren't any leaks. Got a leaky faucet? You should repair or replace any of those, because the drip-drip-drip of water is also a drip-drip-drip of money; not to mention the terrible interplay between mold and home insurance.

12. Install LED or CFL light bulbs.

LED and CFL bulbs can save you a lot of money on energy use over the long haul, plus they have much longer lives than normal incandescent bulbs, making them well worth the upfront investment. Consider installing some in various places — especially in areas where the lights may be in use for long periods, like the living room or kitchen, or left on accidentally, like a back hallway or basement. CFL bulbs tend to be cheaper, but LED bulbs are usually preferable in terms of performance, and have come down in cost quite a bit over the past few years.

13. Choose energy efficient appliances, even if you have to pay more up front.

Unless you were lucky enough to buy a fully-furnished home, you'll likely have to do some appliance shopping. Focus on reliability and energy efficiency above all, even if that seriously increases the cost you have to pay up front. A refrigerator that uses little energy and lasts 20 years is far, far cheaper over the long run than a fridge that runs for seven years and guzzles electricity.

14. Set up your home electronics with a Smart Strip or two.

Looking forward to getting your television, cable box, DVD player, sound system, and video game console set up? When you do it, set things up with proper surge protection (to shield your equipment from electric surges). You might also want to consider a SmartStrip, which makes it easy to “unplug” devices that aren't in use.

A Smart Strip allows the on-off status of one device — say, the television — to control whether or not there's power flowing to other devices (say, the DVD player or the video game console). Having the power cut automatically from such auxiliary devices can save a lot of money over time, especially since many such devices eat quite a bit of power as they sit there in standby mode, constantly draining your money.

15. Plant shade trees near your house.

Mother nature can help you save significantly on your summer cooling costs — and heating costs in winter, too.

Plant deciduous trees — the kind that lose their leaves in the fall — on the western and eastern sides of your house. The leafy shade trees will naturally cool your home during the hot summer months by reducing the amount of direct sunlight that hits your house.

In the winter, they'll lose their leaves, allowing that same sunlight to stream through your windows and heat up the home a bit more. And if you plant evergreens on the north and northwest sides of your home, they won't affect the sunlight, but will shield your home from cold winter winds.

As an added benefit, mature trees can increase your property value. Just make sure to plant them a safe distance from power lines and your home itself. Plant them now, and they'll grow and shade your house sooner.

16. Change the locks and make spare keys.

One of the first things many homeowners do is change the locks on their new home. You don't need to be particularly handy to install new door hardware, and a set of basic doorknobs and locks for your front and back door will only set you back \$20-\$80 or so. It may seem unnecessary, but there's no way to know whether there are copies of your old key floating around, and who might have them if so. Investing a bit of money and time today can protect you from burglary down the road.

While you're at it, get an extra copy of your key made and leave it with someone you trust, so you don't have to shell out \$100 to a locksmith when you inevitably lock yourself out.

17. Air-seal your home.

This isn't such a problem in new homes, some of which are built tight as drums, but in older homes, it's important to look for any places where air may be leaking directly into or out of your home. Common trouble spots are around doorways, windows, and even electric outlets. These aren't just air leaks — they're money leaks. Thankfully, fixing small air leaks is pretty easy — here's a great Department of Energy guide to caulking and weather-stripping, which will keep such air leaks from sucking the heat — and money — out of your home.

18. Develop a home maintenance checklist, and run through it for the first time.

This list should include regular home maintenance tasks that you'd want to do on a monthly, quarterly, or annual basis. Then, make it a habit to run through the items on this list every so often. Doing so will extend the life of almost everything in your home, saving you buckets of money over time.