

Five things you need to know about cooling your house.

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Spring is the season to start thinking about air conditioning -- or at least to have the gizmos looked over. The cooling systems in this country are due for a big change come Jan. 1, 2010 -- in an effort to comply with an international green treaty and spare the ever-depleting ozone layer.

This spring there are at least five things you should know in the cooling department.

1. What's the Montreal Protocol got to do with my summer sweatin'? There's an international treaty -- The Montreal Protocol on Substances That Deplete the Ozone Layer is its official name -- that, if adhered to, could actually lead to the recovery of the ozone layer by 2050. The treaty, which dates to 1987 and has been amended seven times since, aims to phase out the production of a number of substances believed to be responsible for ozone depletion.

One of the culprits is chlorine gas. At least since the 1970s, the coolant that whirls through nearly all air-conditioning systems, residential or commercial, has been something called R-22, which emits chlorine gas.

2. Ditch the chlorine, patch up the ozone. As of Jan. 1, R-22 will be a thing of the past. The new industry standard is a chlorine-free coolant that goes by the catchy name of R-410A, which is a zero-ozone depleter.

If you're thinking of updating your air conditioner, you might want to make the switch now. You'll save cash in the long haul and do good for the universe, says John Schneider, division vice president for Emerson Climate Technologies. Because R-22 won't be produced any longer, the supplies will dwindle and costs for all R-22-dependent systems or parts will increase. If the Environmental Protection Agency has its way, it will be illegal to sell any R-22 systems after Dec. 31.

3. How much energy efficiency can you afford? Since energy costs have bumped up 50 percent in the last five years, you'll want to pay attention to energy consumption. Switching to the updated coolant systems could boost your energy efficiency by as much as 45 percent. What you want to look for here is the SEER (seasonal energy efficiency ratio) rating; the higher, the better. Minimum efficiency today is 13, and you can buy up to 20 SEER. Where you live in the country, though, might affect your rationale here.

"In Minnesota, it would pay back in 10 to 12 years," says Schneider. "In Florida, it'd pay back in two or three years."

4. Money back for making a difference. Pay attention to rebates and tax incentives when it comes to upgrading your environmentally friendly factor. One website that shows what's in your locale is the Database of State Incentives for Renewables & Efficiency; you can find a link to it at chicago.tribune.com/incentives.

The recently passed economic stimulus package, for instance, could provide a \$1,500 tax credit; Florida Power & Light offers rebates for some new systems.

5. Don't skimp when it comes to installation and maintenance. Be sure technicians are NATE (North American Technician Excellence) certified. That's one way to ensure you're getting the most efficiency out of your cooling system. And the best time to schedule your air-conditioner checkup is now, before the summer rush.