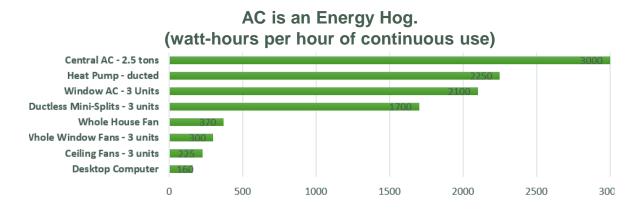


## STAY COOL WITH LESS AC MAY ENERGY ACTION SHEET

This month, learn to stay cool while using much less air conditioning:

- Cool people not empty rooms. Running air conditioning (AC) when no one's home is a waste: it uses much more energy than turning it off when you go out and on when you get back. If possible, install & set a programmable thermostat.
- Use just what you need. Try turning your thermostat up a degree or two each week. You'll soon find that you're quite comfortable at warmer temperatures.
- Plan how you'll stay cool in other ways by using shades, whole window and ceiling fans, and/or occupying rooms that are cooler.
   Many people stay cool without AC until it hits 90° outside.
- If you own your AC unit, prepare for when it needs to be replaced.
  New technologies such as heat pumps use much less energy.

AC gobbles energy and money. Cut out waste and save.





**References** are available upon request from <a href="mailto:CreationCarePartners@gmail.com">CreationCarePartners@gmail.com</a>. This info sheet employs the Task of the Month concept developed by Dr. Stephanie Kimball for Earth Care, an affiliate of Hoosier Interfaith Power & Light.

## HOW TO DO IT: USING THERMOSTATS TO CUT OUT AC WASTE

1) Decide on your temperature settings. Temperature settings are a household affair. Discuss this sheet as a household. Identify why you want to do this, any challenges or drawbacks and how you might overcome them. After considering this table, fill in the worksheet below with your household's schedule and the temperatures at which you've decided to start. Celebrate your household's compromises and successes.

	Best Practice for Staying Comfortable While Saving Energy
At Home	Find a temperature that is comfortable. Add one degree every week until
(awake)	you notice a change in comfort level. Dress lightly.
At Home	Program/set it 10° higher than "At Home (awake)" until a half hour before
(asleep)	you awake. Add one degree each week. Wear lighter PJs, use fewer
	blankets and open windows.
Out (usual)	Program/set it for 5 - 10° higher than "At Home (awake)" until a half hour
	before you return. Every few days, notch the "Out (usual)" temperature
	up a few degrees until it feels noticeably different when you return home.
Out (unusual)	Whether going out for hours or for days, manually set and hold at 85° or
	more so AC will only go on in extreme heat. When you get home, remove
	the hold.

**Schedule & Initial Temperature Worksheet** 

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Temp.
Awake (AM)								
Out for the day (AM/PM)								
Return home (PM)								
Asleep (PM/AM)								

2) If you don't have a programmable thermostat – or timers, if you use window AC units - buy one if possible. Programmable thermostats and times can lower the AC when you're asleep or out and cool your space before you wake or return. By cutting out energy waste, they save a heap on your utility bills. Install a programmable <a href="yourself">yourself</a> or have it installed. Ask whether, if you buy and install it, your landlord will pay for It.

IF YOUR SCHEDULE		
differs each day,	<u>7-Day</u> .	
is the same for 5 consecutive days and differs for each day off,	<u>5-1-1.</u>	
is the same for 5 consecutive days and the same for 2 days off,		
is the same every day,	1 week	

If you want it to set itself or you want to set it remotely, buy one that's <u>"smart"</u> or <u>Wi-Fi-enabled</u>. Find more about the options <u>here</u>. If you have window AC units, buy <u>a timer</u> for each unit if possible. Timers work like programmable thermostats.

3) Set it. You can find directions for your brand online, like these for a Honeywell.



## HOW TO DO IT: CHILLING WITHOUT AC AND REPLACEMENT OPTIONS

<u>Ceiling</u> and floor fans blow away the envelope of warm air and sweat that surrounds your body. They enable you to hike the thermostat 3° to 8° and feel just as cool. A ceiling fan is cheap, easy to install and costs 40 times less to run than central AC. Ask whether, if you install a ceiling fan, your landlord will pay for it.

Whole window fans pull cool night air in through windows on one side of a home and push warm out through windows on the other side. In the morning, the heat is kept out by closing windows, shades and curtains and mold is prevented by running dehumidifiers on each floor until the humidity falls to 55%.

Whole house fans function just like whole window fans except the warm air is exhausted through attic vents.

Air source heat pumps cool and heat. Ducted ones save a lot on heating. Ductless ones - "mini splits" - are highly efficient and save even more on both heating and cooling.

As you consider options, look for **discounts and tax credits** at <u>www.dsire.</u>. Compare EnergyGuide ratings. And choose a contractor who is comfortable with new technologies. You can learn more <u>here</u>.

The table below gives a **relative** sense of different options. Actual figures will vary with the model, dwelling, climate and electricity rate. Because heat pumps replace both the furnace and the AC unit, their upfront costs in the table are reduced by roughly the cost of purchasing a furnace at the same time an AC unit is purchased (estimate: \$2000).

## Comparing the Options - 10 Years

**ENERGY GUIDE** 

**\$1**99

Equipment	Watt-hours per hour	Total Costs	Upfront Costs	Running Costs	Lifetime (years)
Central AC (3 ton, standard)	2600	\$7,100	\$2,000	\$5,100	15 to 20
Central AC (3 ton, high efficiency)	2000	\$7,600	\$3,700	\$3,900	15 to 20
Air source heat pump (3 ton, ducted)	2000	\$6,900	\$3,000	\$3,900	15 to 20
Window AC units (4. 3 in use at a time)	2100	\$4,400	\$1,200	\$3,200	8 to 10
Ductless mini-splits (4, 3 in use)	1080	\$5,200	\$3,500	\$1,700	15 to 20
Whole window fans (3)	333	\$600	\$300	\$300	8 to 10
Ceiling fans (5, 3 in use at a time)	105	\$600	\$500	\$100	10 to 20
Whole house fan	78	\$750	\$650	\$100	10 to 20

**Notes:** \$.12/kWh. Installation costs are not included: these will be highest for central AC and ducted air source heat pumps. The cost of the air source heat pump includes \$350 for backup heat strips.

