

SPEAK UP & ACT NOW: SHORT GUIDES TO ADDRESS CLIMATE CHANGEⁱ

HOME ENERGY USE

QUESTION: Does our home energy use (electricity, heating, air conditioning, cooking) contribute to climate change?

ANSWER: Yes! Many homes use fossil fuels for heating, cooling, cooking, and electricity, which releases greenhouse gases like carbon dioxide and methane into the atmosphere. These gases absorb the sun's heat, acting like a blanket on the Earth, causing climate change.

ACTIONS – WHAT CAN WE DO?

- 1. KNOW YOUR MONTHLY ENERGY CONSUMPTION.** What gets measured gets changed! Log in to your energy provider account(s) to learn about your monthly usage. Look at your energy bills and start writing down your energy usage in a place you can easily see. For most households, cooling, heating, and hot water are the top three energy users. Click here to learn more: [Understanding Your Energy Bill](#) and [What Uses the Most Energy in Your Home?](#)
- 2. DO AN ENERGY AUDIT OF YOUR HOME.** Homeowners and renters alike can benefit. Audits evaluate energy bills, insulation, heating and cooling systems, electrical systems, and appliances to determine energy consumption and waste in your home. Click here to learn more about what an energy audit is: [Saving Energy at Home](#).
- 3. REDUCE HEATING AND COOLING.** In the U.S. alone, home heating and cooling is responsible for about [441 million tons of carbon dioxide emissions annually](#). Setting the thermostat to a lower temperature in the winter and higher temperature in the summer is tremendously important. Better insulation will also help reduce your carbon footprint and lower your energy costs. Click here to learn more: [Energy Savings Tips for Homeowners](#).
- 4. CHANGE THE ENERGY SOURCE OF YOUR HOME.** Another valuable action is to switch to renewable energy sources. If you live in a house or have access to a roof, installing solar panels reduces not only carbon emissions but also energy bill costs in the long term. Or, you can select a “100% renewable” option through your utility company, if available.
- 5. ELECTRIFY YOUR HOME, WHILE ADVOCATING TO GREEN (DECARBONIZE) THE ELECTRICAL GRID.** Switch to electric heat pumps, electric water heaters, and induction cooking ranges. Electric heat pumps can significantly reduce your carbon footprint. If you don't have ducts in your home, you can get a ductless system.

- 6. SAVE ENERGY WHENEVER POSSIBLE.** Switch to energy-efficient electric appliances; use LED lights; and wash your laundry with cold water, use a shorter cycle, and hang clothes to dry instead of using a dryer. Buy devices that have low standby power usage and unplug devices when you are not using them.
- 7. MAKE YOUR MONEY COUNT.** To reduce your environmental impact, choose products from companies who use resources responsibly and are committed to cutting their greenhouse gas emissions and waste. If you have money that is being invested for you, through a pension fund for instance, making sure that it is invested in environmentally sustainable businesses can greatly reduce your carbon footprint.
- 8. REDUCE, REUSE, AND REPAIR.** Each point in production, from extraction of raw materials to manufacturing and transportation—and even recycling electronics, clothes, plastics, and other items we buy—creates carbon emissions. Plastics alone generated 1.8 billion metric tons of greenhouse gas emissions in 2019, which is 3.4 percent of the global total. And, every kilogram of textiles produces about 17 kilograms of carbon dioxide equivalent (CO₂e). (United Nations Actions for a Healthy Planet) Try to buy fewer things, shop secondhand, and repair what you can to reduce your carbon footprint.
- 9. SPEAK UP!** It's one of the quickest and most effective ways to make a difference. Talk to your neighbors, colleagues, friends, and family. Let your utility company know you support bold changes. Appeal to local, state, national, and world leaders to act now.

RESOURCES – WHERE CAN I LEARN MORE?

- [Home Energy Use](#), Climate 101 website, Center for Climate and Energy Solutions
- [Your Guide to Climate Action: Home Energy](#), United Nations
- [Actions for a Healthy Planet](#), United Nations
- For an energy audit of your home in Virginia or another Mid-Atlantic state, contact [Viridiant](#)
- [Spider Exchange](#) (donate and/or “shop” for used items) at the University of Richmond

ⁱ Prepared by members of the University of Richmond Osher Special Interest Group on addressing the climate crisis (2024-25)