



Work from home (WFH) Sustainability Toolkit

Energy and
Emissions



More than 20% of all U.S emissions are attributed to households, and 33.5% of those US household emissions, and 34.7% of overseas household emissions are accounted for in at-home energy usage.

In this toolkit, we share actions you can take today, and updates you can make to your home office setup to reduce your environmental footprint.





We focus on **four key impact areas** in your home office setup that contribute significantly to your overall work from home emissions, including:

- heating and cooling,
- electronics,
- renewable energy,

and more broadly:

- the energy systems in your home.

We also provide **guidance on carbon offsetting**, which means mitigating emissions by investing in projects that reduce or remove carbon emitted to the atmosphere.

HEATING AND COOLING

Whether powered by electricity or gas, at-home heating and cooling systems such as space heaters, central air, fans, air-conditioning, and radiators account for a large portion of energy consumption at home. In some colder climates, heating is the largest energy expense in most homes, accounting for 35–50 percent of annual energy bills.

CHANGE YOUR BEHAVIOR	<ul style="list-style-type: none">• Use the programmatic features on your thermostat to lower temperature settings in the winter and increase the temperature in the summer at times you’re out of the house or sleeping. This can cut your energy bill by 10 percent if you adjust the temperature by 7-10 degrees F for 8 hours while you’re sleeping.• If it is very cold, wear warm clothing and take regular breaks to move around and keep your blood pumping.
UPDATE YOUR EQUIPMENT	<ul style="list-style-type: none">• When purchasing air conditioning systems and heat pumps, consider the energy efficiency of different systems using the seasonal energy efficiency ration (SEER).• Consider replacing your system if it's more than 10 years old. Newer, more efficient models could save up to 20 percent on heating and cooling costs.
INSULATE YOUR HOUSE	<ul style="list-style-type: none">• In the winter, insulate, use weather strips and seal cracks around windows and doors to prevent energy leaking.

ELECTRONICS

Given the increasing use of technology in our everyday lives, it's no surprise that global greenhouse gas emissions associated with electronic usage, internet and systems that support our gadget usage is projected to double between 2020 and 2025. That's why extending the life cycle of electronics equipment, taking advantage of energy efficiency features of your electronics, and disposing of your equipment for reuse can help reduce your carbon footprint.

CHANGE YOUR BEHAVIOR

- Extend the life of your electronic devices by repairing rather than replacing them. Use the website [ifixit](#) to source repair parts and guides for consumer electronics and gadgets.
- Cut home or office duplication of devices. For example, reduce the number of phone or computer charging stations within your home that are plugged in and drawing power.
- Update computer and monitor settings to enable power management features. You can adjust your settings so equipment switches to sleep mode automatically when not in use and enables "battery save mode." And remember to turn off your machine when not in use.

UPDATE YOUR EQUIPMENT

- Replace equipment with ENERGY STAR labeled products. Look for the label "ENERGY STAR Most Efficient 2022," a distinction that recognizes products that deliver cutting edge energy efficiency along with the latest in technological innovation.

RECYCLE AND REUSE

- Dispose of your personal electronics at local recycling and disposal facilities and research whether the equipment maker has guidance on disposal online for your mobile devices, printers, televisions, and computer monitors. For further information see the [recyclenow](#) or [Earth911](#) website.

ENERGY SYSTEMS

Understanding your home’s whole energy system, the inputs and outputs, will help you get a sense of where you can make adjustments to reduce energy usage, make upgrades for efficiency and cut costs.

Even when turned off, electronic and IT equipment use electricity. The Energy Saving Trust estimates the average home spends around \$100 USD a year, just by leaving appliances on standby. Additionally, insulating your hot water cylinder tank with an insulating jacket can save 7-16% a year in water heating costs.

CHANGE YOUR BEHAVIOR	<ul style="list-style-type: none">• Turn off light switches, and unplug unused devices and don’t overcharge devices to minimize energy usage.• Try to choose an area of your home to work that has lots of natural light. This will reduce the need to use artificial lighting while you are working during the day.
UPDATE YOUR EQUIPMENT	<ul style="list-style-type: none">• Invest in smart power strips that can automatically shut down the power to products that go into standby mode.• Install Smart Meters in your home to track real time energy usage and costs.• Insulate your hot water cylinder tank.
PERFORM AN ENERGY AUDIT	<ul style="list-style-type: none">• Perform a home energy audit to identify where your home is losing energy. This includes locating air leaks, checking insulation, and inspecting heating/cooling equipment. Conduct a <u>self-assessment</u> or get a professional energy audit with a private company.

RENEWABLES

Whether installing onsite renewables or participating in a green power program with your utility, switching to green power can support renewable energy development in your community and reduce the carbon footprint associated with the electricity you purchase. In 2021, utility-scale solar and hydropower was [11% cheaper than fossil fuel](#) powered electricity alternatives and [onshore wind was 39% cheaper](#).

UPDATE YOUR EQUIPMENT

- If you own your home or apartment, install on-site [solar panels](#) or [heat pumps](#). Research which [companies in your area](#) perform solar installation or can provide consultation. A renewable energy professional can help you determine the best option for your home based on your current energy usage and the installation possibilities.
- Look into what incentives your local or regional government might provide if you adopt renewable energy systems or install energy efficient appliances, windows, etc. For example, you can learn more about the U.S. Federal programs [here](#).

CAMPAIGN FOR RENEWABLES

- If you rent your home or apartment, consider putting together some resources for your landlord to consider making the case for cost savings associated with onsite renewables.
- Engage your utility and determine whether there are any Green Power Programs you could enroll in. Or consider alternative energy providers if they don't provide solutions you're excited about.

CARBON OFFSETTING

“Carbon offsetting” means mitigating emissions by investing in projects that reduce or remove carbon emitted into the atmosphere elsewhere. While we suggest our employees always prioritize reducing home office emissions using the strategies laid out above, we believe purchasing high-quality carbon credits to mitigate remaining home office emissions can help accelerate the societal-level low carbon transition and save our planet.

UNDERSTAND YOUR CARBON FOOTPRINT	<ul style="list-style-type: none">• Use an online carbon footprint calculator to understand how much carbon you are responsible for emitting into the atmosphere and identify opportunities to reduce your emissions, referencing the suggestions we’ve included on previous pages.
IDENTIFY AND OFFSET PROVIDER	<ul style="list-style-type: none">• Select projects from an offset provider that has been third-party verified, a process that ensures the project meets baseline requirements in reducing emissions and calculation methodology.• Consider selecting projects with social-impact related co-benefits.



thank you