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Home
Climate change impact and actions

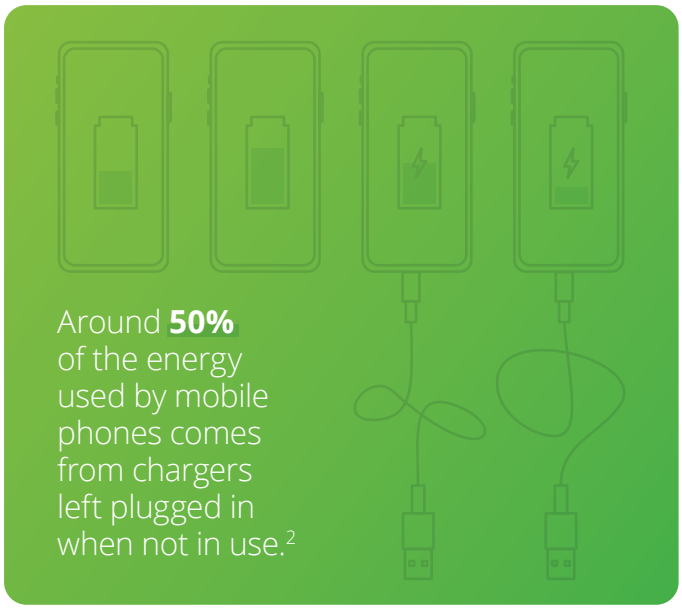
Overview of topic

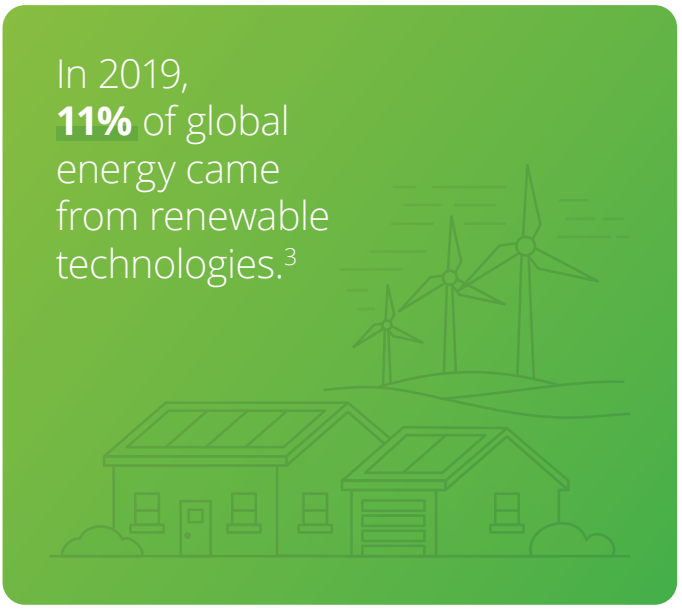
On average, the energy we use for our homes accounts for around 20% of carbon dioxide emissions.[1] This energy is used to light, cool and heat our homes as well as the electricity used to run appliances and other electronics. In many parts of the world, heating and cooling typically consume the most energy followed by lighting.

We can reduce home energy use and its associated emissions through choosing: the attributes of the appliance or system, environment in which it operates, how it operates, or the source of the energy. Home appliances, lighting and heating and cooling systems come in a range of models and/or technologies and choosing those which maximize efficiency will result in lower energy use per unit of output. Also, modifying the structure of a house, such as through improving insulation and reducing leakage through windows and doors can significantly decrease energy use. Operating household appliances or systems in modes that minimize their energy, such as through programmability or simply unplugging them when not in use, also reduces associated emissions.

Regardless of the amount of energy used, emissions per unit of energy consumed will be determined by the generation source. In some geographies, people can choose their energy providers, can install green power at their home (solar panels), or can opt for green power purchasing through their existing providers or through others, thereby reducing emissions.

Did you know?





- Energy used for heating and cooling accounts for nearly 50% of all global energy demand.[4]
- There are 1 billion single-room air conditioning units in the world right now, one for every seven people on Earth.[5]
- Doubling the share of renewables in the global energy mix by 2030 would increase global GDP by up to 1.1%, or US$1.3 trillion.[6]
- Upgrading a home's heating and cooling equipment can reduce energy use by up to 20%.[7]

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Home

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Positive climate actions you can take

Today

- [ ] Unplug your chargers for mobile phones and devices when not using them.
- [ ] Use cold water settings for your laundry and air dry as often as possible.
- [ ] Prioritize your daily activities to maximize natural daylight.
- [ ] Use the 'Energy Saver' mode on your phone and laptop to help the battery last longer.

Next month

- [ ] Switch to energy saving lightbulbs—they use one third of the electricity of conventional bulbs and can last up to 10 times as long.
- [ ] Explore options for using renewable electricity in your home.
- [ ] Choose a laptop instead of a desktop—it consumes five times less electricity.

Over the coming year

- [ ] When buying new appliances consider their efficiency as part of the purchase decision.
- [ ] Install a programmable thermostat.
- [ ] Explore installing a water-saving showerhead.
- [ ] Regularly maintain your heating and air conditioning systems to increase energy efficiency.
- [ ] Explore sustainability focused home upgrades, such as attic insulation to reduce emissions.

Home
Climate change impact and actions

Additional Resources

Read

WWF | Green tips (blog)

National Geographic | Renewable energy, explained (article)

Watch

WWF | Climate crisis: Mobilizing action to ensure a liveable planet (webinar)

TED Talks | The four things you need to know about the energy you use (video)

TED Talks | How behavioural science can lower your energy bill (video)

National Geographic | Renewable energy 101 (video)

[1] WWF.
[2] Ibid.
[3] Hannah Ritchie (2017) - "Renewable Energy". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/renewable-energy' [Online Resource]
[4] Ibid.
[5] Martin Armstrong, "Air Conditioning Biggest Factor in Growing Electricity Demand", Statistica, August 27, 2020.
[6] WWF.
[7] US Department of Energy, "Energy Data Facts", accessed December 10, 2020.

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