# BECOMING ENERGY SMART





### What is energy?

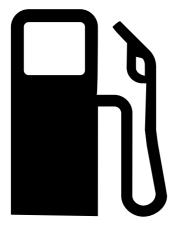
Energy is a fundamental concept that describes the ability or capacity to do work. It is what allows things to happen or change. Energy is all around us, and it comes in different forms.

It can be in the form of motion, heat, light, sound, electricity, or even stored in objects or substances. Energy comes from renewable and non-renewable sources.

#### Renewable energy

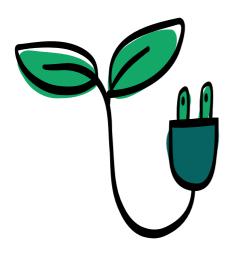
Renewable energy is a type of energy that comes from natural sources that can be used again and again without running out. It is like having an unlimited supply of power! These sources of energy include things like sunlight, wind, water, plants, etc.





### Non-renewable energy

Non-renewable energy is a type of energy that comes from sources that cannot be replaced or reused once they are used up. These sources took millions of years to form, and once they are gone, we won't have any more. Fossil fuels like coal, oil, and natural gas are some examples.



### LET'S DO ENERGY AUDIT

Performing an energy audit at home helps identify areas where energy is being wasted and suggests ways to improve efficiency. Here's a brief guide on how to conduct a basic energy audit:

- 1.Inspect insulation: Check for any gaps, cracks, or inadequate insulation in windows, doors, walls, and the attic. Seal any leaks or consider adding insulation where necessary.
- 2. Assess lighting: Replace traditional incandescent bulbs with energyefficient LED or CFL bulbs. Consider installing motion sensors or timers to reduce unnecessary lighting usage.
- 3. Examine appliances: Determine if your appliances are energyefficient. Look for the ENERGY STAR label when purchasing new devices. Unplug or switch off electronics & chargers when not in use.
- 4. Evaluate heating and cooling: Check for air leaks around windows and doors. Ensure that the thermostat is set to an optimal temperature and consider installing a programmable thermostat for better control. Clean or replace air filters regularly.
- 5. Monitor water usage: Inspect faucets, pipes, and toilets for leaks. Fix any leaks promptly. Install low-flow showerheads and faucets to reduce water consumption.
- 6. Consider renewable energy: Assess the feasibility of installing solar panels or other renewable energy systems based on your location and budget. Explore available incentives or rebates.
- 7. Review energy habits: Evaluate your daily energy habits and identify areas where you can reduce consumption. Turn off lights when leaving a room, unplug unused electronics, and use energy-efficient settings on appliances.
- 8. Track energy usage: Monitor your energy consumption over time using energy monitoring devices or online platforms provided by your utility company. Identify patterns and adjust your habits accordingly.

Remember, for a comprehensive energy audit or if you're unsure about certain aspects, it's advisable to consult a professional energy auditor who can provide more detailed assessments and recommendations specific to your home.

# Our responsibility

Non-renewable resources, like fossil fuels and minerals, can be harmful to our planet. When we dig them up or burn them for energy, they release gases and pollutants into the air. These things can cause problems like air pollution and climate change. Also, non-renewable resources are limited in supply, which means they will run out one day. This can make things difficult for us because we won't have enough of these resources to use. That's why it's important to find and use other sources of energy that are better for the environment and can be replenished over time.

POST 2018,
THE GLOBAL USE
80% FOSSIL FUELS
(33.6% OIL, 27.2% COAL,
23.9% LIQUID GAS)
6.8% HYDRO,
4.4% NUCLEAR
4% RENEWABLES, SUCH
AS WIND, THERMAL, BIO
ENERGIES, SOLAR, AND
WASTE.



## The shift!

Shifting from non-renewable energy to renewable energy is a positive change for our planet. Non-renewable energy sources, like coal and oil, can harm the environment and will eventually run out. Renewable energy, on the other hand, comes from sources that will never run out, such as the sun, wind, and water. By using renewable energy, we can help reduce pollution and make the air cleaner to breathe. It also means we won't run out of energy in the future.

### WHAT SHOULD WE DO?





- 1. Turn off lights when leaving a room.
- 2.Unplug chargers and electronics when not in use.
- 3.Use energy-efficient light bulbs.
- 4. Keep doors and windows closed when using heating or cooling.
- 5.Use natural light during the day instead of turning on lights.
- 6.Set thermostats to a moderate temperature.
- 7.Use blankets or wear warm clothes instead of turning up the heat.
- 8. Close curtains or blinds to keep heat out during hot weather.
- 9. Take shorter showers to save hot water.
- 10. Use a microwave or toaster oven for small cooking tasks instead of the oven.
- 11. Wash clothes in cold water when possible.
- 12. Hang clothes to dry instead of using a dryer.
- 13. Keep refrigerator and freezer doors closed and avoid frequent opening.
- 14. Use energy-efficient appliances and electronics.
- 15. Insulate homes to reduce heat loss in winter and heat gain in summer.
- 16. Plant trees or use shading devices to block sunlight and keep homes cooler.
- 17. Use natural ventilation by opening windows instead of relying on fans or air conditioning.
- 18. Turn off electronics and computers when not in use instead of leaving them on standby mode.
- 19. Use natural ventilation by opening windows instead of relying on fans or air conditioning.
- 20. Educate others about the importance of energy conservation and encourage them to practice these habits too.