

# How Students Can Help Fight Climate Change

The evidence is clear. The Earth's surface temperatures continue to rise. The ocean absorbs more heat. Ice sheets shrink. Glaciers disappear. Sea levels rise. Extreme weather events are commonplace.

Global scientific consensus points to human and industrial activities as the primary sources of greenhouse gas emissions (GHGs) being trapped in our atmosphere causing much of the change. Per NASA: "Multiple studies in peer-reviewed scientific journals show that 97% or more of actively publishing climate scientists agree: Climate-warming trends over the past century are extremely likely due to human activity."<sup>1</sup> We must look for ways to continue reducing CO<sub>2</sub> emissions to stave off an environmental catastrophe.

So, what can you do?



## Saving water saves energy -- Turn off the tap

We take water for granted, but it takes a lot of energy to get water to your tap. The water you use each day requires 1.1kWh of energy to treat and deliver. Every kilowatt/hour releases a little more than 1 pound of CO<sub>2</sub> into the atmosphere. If your water agency doesn't use renewable energy, that 1.1kWh equates to more than 1 pound of CO<sub>2</sub> emissions trapped in our atmosphere.<sup>2</sup>

### We waste, on average



**180**  
gallons each week

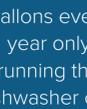


**7.5**  
gallons leaving the tap running 5 minutes washing dishes

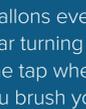


**10,000**  
gallons due to leaks each year

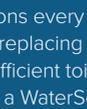
### Here are easy ways to save water, and the energy that delivers it



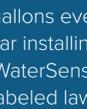
**320**  
gallons every year only running the dishwasher only when it's full



**5,700**  
gallons every year turning off the tap when you brush your teeth or shave



**13,000**  
gallons every year by replacing old, inefficient toilets with a WaterSense labeled model



**7,600**  
gallons every year installing a WaterSense labeled lawn irrigation system

## Energy Vampires



Energy vampires are electronics that use power when plugged in but not in use. The average home has 40 such devices that use power while in standby mode. And that adds up quickly. Every kilowatt/hour releases a little more than 1 pound of CO<sub>2</sub> into the atmosphere.<sup>2</sup>

### Electricity used in standby mode



**45**  
kWh/year when your printer is off



**25**  
kWh/year when your computer is asleep



**10**  
kWh/year leaving your coffee maker plugged in



**45**  
kWh/year when your DVD is off



**75**  
kWh/year when your music system is off

### You can save

**27**

Watts a day turning off lights

**16**

Watts a day unplugging your cable set-top box



**9.5**

Watts a day turning off your desktop computer

**6.3**

Watts a day unplugging your printer

## Meat Free Mondays



Cutting down on meat and dairy is the single biggest way to lessen your impact on the earth, according to new research. Raising livestock creates 7.1 gigatons of greenhouse gasses a year, greater than 14% of the world-wide total.<sup>3</sup>

### The number of pounds of greenhouse gases released for every pound of meat you eat



**86.4**  
lbs. Lamb



**59.5**  
lbs. Beef



**26.6**  
lbs. Pork



**26.2**  
lbs. Farmed salmon

...and these figures don't include the amount of land and water used.

### Impact of going meatless



**133** gallons of water saved each meatless meal



**8** pounds of carbon removed from your carbon footprint each meatless day...and you'll reduce your risk of heart disease and save money, too!



## Shop at thrift stores

Americans throw away 10.5 million tons of clothes each year. When you buy from thrift stores, you're saving those items from the landfill.

### Why it matters



**713**  
gallons of water are used to make one cotton shirt



**12**  
pounds of carbon pollute the air for every polyester shirt made



**20**  
% of industrial water pollution is produced from textile treatment and dyeing



**23**  
% of all chemicals produced world-wide are used to make fabric

### Sources

- <sup>1</sup>NASA: Scientific Consensus: Earth's Climate is Warming
- <sup>2</sup>BlueSkyModel: 1 Kilowatt-hour
- <sup>3</sup>FAO: GHG emissions by livestock

### Save water to save the planet

- Building Green: The Embodied Energy of Tap Water
- EPA: How We Use Water
- EPA: Fix a Leak Week
- Science Alert: Here Are The Most Common Ways You're Wasting Water That Cost You More Than You Think
- EPA: Statistics and Facts

### Slay energy vampires

- Berkeley Lab: Standby Power
- NRDC: Devices Wasting Huge Amounts of Electricity When Not in Active Use
- EPA: Fix a Leak Week
- Save on Energy: The Hidden Costs of Unused Electricity in Your Home

### Meat Free Monday and beyond

- AAAS: Reducing Food's Environmental Impacts Through Producers and Consumers
- Family Counselling: Wanting to eat healthier? Try Meatless Mondays
- Meat Eaters Guide: Climate and Environmental Impacts
- Arrow Quip: Top Benefits Buying Locally Grown Food

### Shop at thrift stores

- World Resources Institute: The Apparel Industry's Environmental Impact in 6 Graphics
- SERC: Why Thrifting is Good for the Planet, Not Just Your Wallet
- Sustain Your Style: Fashion's Environmental Impact

This infographic provides tips for school staff, parents and students. Infographic by REC Solar