



Climate change is real turn off your lights!

- Turn off your lights when you don't need them!
- Get compact fluorescent bulbs! In the long run, you'll save energy and money.
- Discard your halogen torchieres! They are a fire hazard and use 5-10 times more energy (300-500Watts) than a normal lamp.

LIGHTS AND ELECTRICITY

Electricity

Lighting, most of which is from inefficient incandescent lights, uses about 25% of all electricity in the United States.

Electricity is produced mostly by burning fossil fuels. In Massachusetts, the fuel mix for electricity production is:

- 37% oil
- 31% coal
- 22% nuclear
- 7% natural gas
- 1% hydro
- 0% solar and wind

Shut Off Your Lights!

Turn off your lights when you don't need them. It sounds so simple: at no cost and with very little effort you save money and energy, and prevent your bulbs from burning out fast and the climate from heating up. Now you just need to remember...

Motion Sensors

Motion sensors make sense in public spaces. Universities and companies can cut their electricity bills considerably by installing motion sensors in bathrooms, hallways, offices, libraries, etc.

Compact Fluorescent Bulbs

Yes, Compact Fluorescent Bulbs are much more expensive to buy than ordinary bulbs. But even though they cost between \$8-12 each, they will save you much more money in the long run.

A Compact Fluorescent Bulb **lasts ten times longer** than an incandescent bulb.

A single Compact Fluorescent Bulb **saves \$25-50** in bulb and electricity costs over its lifetime!

Over its lifetime, one single Compact Fluorescent Bulb **prevents 1,000-2,000 pounds of carbon dioxide** from heating the atmosphere.

It also **prevents the emission of 8-16 pounds of sulfur dioxide**, which causes acid rain.

The same Compact Fluorescent Bulb will also save the cost of buying and installing a dozen ordinary bulbs.

Tufts Light Bulb Exchange Program

Tufts students, staff, and faculty can bring their incandescent bulbs to the Tufts Climate Initiative office in Miller Hall (Medford Campus) and **get free Compact Fluorescent Bulbs** to replace them.

If you have questions call TCI at: 617-627-5517

If you are not at Tufts:

Buy Compact Fluorescent Bulbs at the hardware store and ask for rebates.

Buy Compact Fluorescent Bulbs over the internet at www.efi.org.

Call your utility company about Compact Fluorescent Bulb rebates.

Halogen Torchieres

One single halogen torchiere can cost you between \$50 and \$160 in electricity costs each year.

A comparable standing lamp with Compact Fluorescent Bulbs will cost you only \$4 - \$14 in electricity costs a year.

Halogen torchieres pose a fire hazard. For that reason they are prohibited at Tufts University.

While You're At It...

why don't you turn off your computer...

It uses about as much energy to operate as two to three incandescent bulbs.

CLIMATE CHANGE FACTS

Climate change, or global warming, is caused mainly by burning fossil fuels (coal, oil, gasoline, and natural gas). This creates carbon dioxide (CO₂), a gas that stores heat. CO₂ and other gases that store heat are called "greenhouse gases."

Natural greenhouse gases are necessary for life on earth. Without them, we could not live because the earth would be too cold. Too much of them, however, and global temperatures rise, the climate is destabilized, and our health and the health of the global ecosystem is in danger.

We have been putting more and more heat-trapping gases into the atmosphere, raising the average global temperature, and creating climate change.

The overwhelming majority of scientists agree that climate change is real and poses a very serious global threat.

Climate change is happening today:

- Global temperatures are rising
- Sea levels are rising
- Severe weather events are increasing

Analysis of Antarctic ice sheets shows present-day atmospheric levels of heat-trapping CO₂ are 30% higher than at any other time in the last 420,000 years and are growing.

We can expect to see:

- Further rise in severe storms, down-pours, and droughts;
- Great regional differences: Some areas will flood more, and other areas will suffer from increased droughts;
- Spread and increase of agricultural pests and tropical diseases such as hantavirus, malaria, and dengue fever;
- Severe damage to fragile ecosystems.
- The United States has only 5% of the world's population yet contributes 25% of all greenhouse gases.

Each American is responsible for about 22 tons of CO₂ per year. If we want to stabilize the climate, each person on the planet should only produce about 2 tons of CO₂ per year.

Electricity production is the largest source of greenhouse gas emissions in the U.S. (29% in 1996, just ahead of transportation's 26%).

1998 was the hottest year on record since reliable measurements began in 1880. It surpassed the prior record from 1997, which in turn had broken a record set in 1995. The 1990's are the hottest decade on record, breaking the previous high mark.... held by the 1980's.

BE A CLIMATE HERO!

Drive less!

A third of U.S. greenhouse gas emissions come from transportation!

Buy a fuel efficient car!

You will cause much less pollution and save a lot of money!

Bicycle!

Biking creates zero emissions, and it's fun!

Use your thermostat!

In the summer, set the thermostat for your air-conditioning higher: between 78-83 degrees. In the winter, set the thermostat for your heat lower: between 65-68 degrees during the day between 50-60 degrees at night.

Insulate your house!

New England homes are notorious for being poorly insulated: close storm windows, caulk-up cracks, and put plastic on your windows.

You'll be a climate hero, and you'll save money!

Switch from oil to gas!

If you have an oil furnace, consider switching to gas. Oil produces much more CO₂ per unit of heat produced.

Turn off your computer!

If you don't use your computer for 15 minutes or longer, turn the monitor off. If you don't use it for an hour or more, shut the whole computer off. You'll save money, and it's good for your computer too!

Buy Energy Star appliances!

These are especially energy efficient. Learn more about the Energy Star program at: www.energystar.gov

Recycle!

Recycling saves resources, reduces waste, and conserves energy!

Fly less!

Flying somewhere produces as much CO₂ as if you would drive there in your car!

Eat less meat!

Meat production is very energy intensive. If you eat less meat, you also prevent much water pollution; it's healthier too!

Buy less stuff!

You'll save resources, energy, and money!

Learn more by visiting us at: www.tufts.edu/tci