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Climate Change Solutions: What You can Do Right Now

We know. It's overwhelming.

The threat of global warming hangs over our planet like a storm cloud. If not checked soon, it could some day soon cause untold – possibly irreparable – harm to our planet's ecosystem, triggering:

- severe weather changes;
- threats to our food and water supplies;
- rising sea levels;
- glacier melting;
- endangerment of thousands of plant and animal species;
- the spread of deadly diseases.

But there is good news. The world now recognizes the problem. Governments around the globe are taking action to cap carbon dioxide emissions (which account for more than half of the greenhouse gases that trap the sun's heat inside the earth's atmosphere), set meaningful targets for fuel-efficient cars and offer incentives for green buildings.

The U.S. government, unfortunately, has not led the debate on climate change solutions, and has been slow to embrace significant change in these big areas. In short, the U.S. government either says the threat isn't real – despite almost unanimity among scientists that the threat is real and imminent -- or that dealing with it will harm the economy.

The U.S. government has refused to sign the Kyoto Protocol most of the nations of the world have signed in order to set mandatory caps on CO2. And the U.S. has refused to set meaningful fuel-efficiency standards for cars. These are two of the biggest, most important actions the U.S. government can – but won't – take to save our planet.

But that doesn't mean you can't do something – right now – and make a difference.

Because here's the truth. If just a third of us take a handful of meaningful actions in our daily lives to conserve energy – thereby conserving fossil fuels – we stand a good chance of reducing our nation's emissions to the targets set for the United States by the Kyoto Protocol the U.S. government refuses to sign.

That's right. Us. If a third of us agree to stand against the gravest threat in human history, and decide to do our part in a systematic way, then we can do collectively what our elected leaders refuse to consider.

What's more, many of the ideas that we'll describe below can also save us money. That helps the economy – countering one of the main reasons the U.S. government has refused to act on significant climate change solutions.

So what should we do? Here's our Top 10 list which can apply to individuals, organizations and businesses. There are dozens more where these come from, but this should get you started. Take a look through the ones that make sense for you right now, send us an email here at Earth Day Network with your pledge, and begin your own, personal journey with the rest of us to save the earth we live on. The time to act is now.

Project Switch: Change your light bulbs!

Many consumers don't know this, but there are now highly efficient compact fluorescent light bulbs (CFLs) that last for years, use a quarter of the energy of regular bulbs and actually produce more light. Look for the government's ENERGY STAR label, which means the bulb has been tested for quality and efficiency. While each ENERGY STAR qualified bulb will cost more initially – anywhere from $3 to $9 a piece – remember that there are two

price tags: what you pay at the register and what you pay in energy costs to over the bulb's lifetime. So you may pay more up front, but you will actually save hundreds of dollars in your household budget over the long term because of their long life.

While CFLs were harder to find a few years ago, they're now widely available and much more affordable. You'll find them at major home improvement and hardware stores – even grocery and some convenience stores.

Here's the impact. If every household in the U.S. replaced a burned-out bulb with an energy-efficient, ENERGY STAR qualified compact fluorescent bulb, the cumulative effect is enormous. It would prevent more than 13 billion pounds of CO2 from entering the atmosphere – which is like taking more than a million cars off the road for an entire year.

There are other, simple things with household lighting you can do to conserve: turn off unneeded lights, dim lights when you can and bring natural sunlight into your home when it is feasible.

But changing those old light bulbs and replacing them with ENERGY STAR qualified compact fluorescents that can last for a decade or more is by far the best thing you can do.

Drive your car differently – or drive a different car altogether!

The sad truth is that your car emits as much CO2 as your entire house. That's the bad news. The good news is that anything you can do to improve the fuel efficiency of your car will have an enormous impact on climate change. In fact, experts say that paying attention to fuel efficiency in your car may be the single biggest thing you can do to prevent global warming

Buying a fuel-efficient car (like a Hybrid) is wonderful. In fact, replacing your gas-guzzling car with a fuel-efficient one is by far the best thing you can do, out of all your choices. But not all of us can do that – at least, not right now. Carmakers haven't sold enough hybrids in the U.S. yet to make them as affordable as they should be. That will change, but not for a few years.

So, in the interim, there are things you can do with the car you drive now to conserve energy and be more fuel-efficient.

Drive less. Every year, Americans as a whole drive more miles than they did the year before. Stop this trend, and we drive a stake in that trend. Telecommuting and public transportation are great options – once a week saves a ton of CO2 a year -- but even piling multiple errands into one trip helps. If you can walk instead of drive, even better.

Get your car tuned up. Just a simple tune-up often improves fuel efficiency by half. If 100,000 of us went out and got a tune up, we save 124,000 tons of CO2.

Slow down, don't race your car's engine, and watch your idling. All of these save on gas (saving you money) and have a big impact on burning gasoline.

Horribly inefficient SUVs, minivans and pickup trucks now make up more than half of the cars on American roads. The real tragedy is that automakers could double the current average fuel efficiency of SUVs if they wanted to, which would save 70 tons of CO2 per car. The technology exists. Unfortunately, consumer demand does not.

Your house – not too hot, not too cold!

The bad news is that half of your household energy costs go towards just two things – heating and cooling. The good news is that means you have lots of room for improvement, and even small changes make dramatic improvements in household fuel efficiency.

Older heating and cooling systems are a third less efficient than the new systems. So replacing the old with the new is a wonderful idea, but not very practical for most of us. Things you can do right now to make sure you're setting the right temperature in your house include:

Tune up your heating system. This one thing every couple of years can reduce your heating costs by 10 percent a year.

Clean vents, close unused vents, and change filters in the vents. Again, just these simple things will save you 10 percent.

Buy a programmable thermostat, which can regulate different temperatures at different times of the day. And if you have one, use it! Right now, three-quarters of people who have

programmable thermostats don't use them at all.

Add two degrees to the AC thermostat in summer, and two degrees in winter. If everyone did this, the cumulative impact is significant.

Make sure windows and doors are sealed. Again, this will dramatically improve your household fuel efficiency.

Of course, if you can stand it, by far the best approach is to avoid air conditioners at all. Ceiling fans, instead of AC, can reduce your cooling costs by more than half.

Tame the refrigerator monster!

Did you know that your friendly refrigerator has a voracious energy appetite? It is, by far, the single biggest consumer of electricity in the average household, responsible for 10-15 percent of the electricity you use each month.

Older refrigerators, as a rule, are far less efficient than the newest ones – as much as 50 percent more efficient in many cases. But buying a brand-new, energy-efficient refrigerator is almost certainly not in the cards for most of us. Fortunately, other things will help.

Don't set the thermostat too high. Even 1 degree will make a big difference.

If your refrigerator is near a heating vent, or always in the sun, then change the location, cover up the heat vent near it or drape the window.

Turn on your "energy saver" switch near the thermostat.

Clean the condenser coil. This one, very simple thing can improve the efficiency of your refrigerator by a third!

Get rid of your second refrigerator. If you don't need it, don't waste the energy.

Make sure the doors seal properly, and keep the cool in.

Twist the knobs on your other household appliances!

The other big users of energy in your household are your hot water heater, your washer and dryer, and your dishwasher. Each, in its own way, can be inefficient. Here are some things to try:

Either turn the hot water heater down a couple of degrees, or turn on the "energy conservation" setting.

Buy insulation for your hot water heater at a local store and insulate the pipes as well.

Install a timer on your water heater to turn off at night and just before you wake up in the morning.

When possible, wash a few dishes by hand. Over time, that will save a few loads in the dishwasher, conserving energy.

Don't pre-rinse dishes. Today's detergents are powerful enough to do the job.

Wait until you have a full load to run the dishwasher.

Wash clothes in warm water, not hot. The clothes will be just as clean, and you'll cut energy use by 50 percent.

Don't over-dry your clothes. That will save 15 percent.

Green plants with less water, more trees to provide shade.

While it is true that planting more trees will help in the short term because they essentially soak up carbon, they also release carbon dioxide when they die. So it just postpones the problem. But there are other reasons to plant trees – as wind breaks to save energy, and as shade to lower cooling costs. And even the short-term help while we get our act together is a good thing.

As for plants, do everything you can in your yard and garden to create ways in which plants use less water. Choose hardier plants, plant things in groups that need more water and put in mulch to help keep moisture in. When you mow your grass, make sure you do it smartly – with sharp blades, and only when the grass needs cutting. Finally, make sure you water

your lawn sparingly. All of these will conserve energy.

Buy Green Energy, and invest in green energy stocks.

Imagine if we ran out of fossil fuels tomorrow, what would we do? Well, we'd get our electricity from renewable sources – solar panels, geothermal and wind power sources. Many utilities now give consumers the option to buy "green power." Ask for it!

Learn the truth about nuclear power and natural gas as viable "green" options. They aren't. Radioactive waste will be a problem for tens of thousands of years into the future, and natural gas kicks out almost as much CO2 as coal and oil. Natural gas can help us make a transition, but it isn't the solution.

Finally, if you invest, invest in green stocks and renewable energy companies through socially responsible funds. They perform just as well (if not better) than all of the unfiltered funds.

Go organic.

Even with our vast reservoir of scientific knowledge about farming, most American farmers still spray a billion pounds of pesticides to protect crops each year.

Now here's the kicker: when chemical pesticides are used to kill pests, they also kill off microorganisms that keep carbon contained in the soil. When the microorganisms are gone, the carbon is released into the atmosphere as CO2. And when those organisms are gone, the soil is no longer naturally fertile and chemical fertilizers become a necessity, not a luxury.

But besides going organic – thereby saving the carbon release from soil – there are other simple things you can do with food that will also make a difference:

Eat locally grown food. If the food doesn't have to travel far, there's less CO2 from the trucks that ship it.

Eat fruits and vegetables in season. Again, that saves the enormous transportation costs.

Plant your own vegetable garden. It's not as hard as you might think.

Buy recycled.

This may sound simple, but it takes less energy to manufacture a recycled product than a brand new one. So if you and every other consumer buy recycled, you'll help create a market, and conserve energy along the way.

Because many manufacturers don't go out of their way to tout their recycled products, you should know that aluminum and tin cans, glass containers, and pulp cardboard have a fair amount of recycled content. So buy away!

Recycled is often considerably cheaper than non-recycled, so it's cost-effective as well as conservation-minded. For instance, recycled paper can be as much as a third cheaper than non-recycled paper.

Finally, before you buy, check to see if the product or its packaging can be recycled. The recyclable logo (three arrows forming a triangle) is fairly common now.

Be a minimalist.

We know it's difficult, but in today's consumer economy, an easy way to conserve energy is to simply use – and buy -- less. Every time you buy something, energy has gone into getting that product to you. So the less you buy, the more you save energy-wise. It's a simple equation.

This last item on our Top Ten list may, in fact, be the single biggest way to make a dent in the global warming problem. Again, we know it sounds obvious, but buying less things – some of which you just don't need – changes the energy equation across the board, on every single consumer product. If everyone used less, the impact would be large indeed.

So how about some specific things? Here are a few:

Buy in bulk. In short, bulk items use less packaging, which translates into less energy.

Buy one of something, not 21 of something. You don't need 21 pairs of shoes, if one pair

works just as well.

Go through your closet. Donate or recycle what you really don't need, then make a pledge not to replace everything you just got rid of.

Buy quality products that will last longer. Over time, you'll obviously buy fewer products that way.

Be creative in what you use for work, play and leisure. You don't always have to buy new products for activities. Re-use in creative ways.

Well, that's it – Earth Day Network's Top 10. As we said at the start, if just a third of us in the United States follow through on most of what's on this list, we can all collectively make a difference – and keep greenhouse gas emissions where they might otherwise be if the U.S. government stepped in and imposed mandatory CO2 caps and fuel-efficiency standards.

We can make a difference.