**What Can Individuals Do to Respond to Climate Change?**

Whether purchasing a new vehicle or light bulb, deciding where to shop or bank, or making decisions at work, individuals nowadays have many options to reduce their carbon footprint. Good information is hard to find, though, and many of us do not know where to turn, whether our goal is to save money or reduce carbon emissions. If we include home electricity use, personal transportation, and other activities in the home, households account for roughly a third of all emissions in the US and a similar share in other countries.

Our research suggests that initiatives directed at household actions can achieve a “behavioral wedge” – a 20% reduction in US household carbon emissions – in the next decade. Is this a meaningful amount? It is roughly equal to all of the emissions of France and larger than the total emissions of more than 150 countries. Making more sustainable decisions and changing some simple daily habits thus can make an important difference. Although there is no substitute for large-scale actions by governments, companies, religious organizations, colleges and universities, and other large organizations, a surprising number of actions within the direct control of individuals can play a key role. If you want to know more about the importance of individuals and households in the fight against climate change, these papers and the sources they cite are a good starting point:

* The Carbon-Neutral Individual at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1024159>
* Individual Carbon Emissions: The Low-Hanging Fruit at  <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1161143>

The following recommendations provide a pathway to help you reduce your carbon footprint. Although we recommend starting with a quick assessment of your carbon footprint, followed by a focused effort on the most promising behaviors, you should not get discouraged if you are not perfect or if you can only take small initial steps. If you are in the US, multiply every step you take by 330 million to get a sense of the effect that your behavior would have if everyone did what you do. And remember that what you do will affect those around you, too. The key is to get started.

**What Are the Most Important Actions I Can Take?**

When you are deciding which actions to take, think about which ones will have the greatest effect on carbon emissions (we call this “technical potential”) and which are easiest to do (we call this “behavioral plasticity”). Do not try to be perfect, but try to take those actions that score highest on these two metrics for you. This chart provides a list of several of the most promising types of actions, but these are just the tip of the iceberg, and we provide more detail after the charts.

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| **High Priority Household Actions (from Gardner & Stern 2008; Dietz et al. 2009)** |
| Choose a More Fuel-Efficient Vehicle |
| Weatherize Your Home |
| Adopt Efficient Driving Habits |
| Choose Efficient Appliances |
| Choose Efficient HVAC equipment |
| Adjust the Thermostat |
| Avoid Standby Electricity |
| Change HVAC filters |
| Maintain Your Car – Tire Pressure, Filters |
| Low rolling resistance tires |
| Choose an Efficient Water Heater |
| Wash Clothes in Cold Water |
| Adjust the Water Heater Temperature |
| Install Low Flow Showerheads |
| Carpool and Trip Chain |

**Learn More about the Most Important Steps You Can Take**:

* <http://www.environmentmagazine.org/archives/back%20issues/september-october%202008/gardner-stern-full.html>
* <https://my.vanderbilt.edu/behavioralwedge/>
* <https://www.nrdc.org/stories/how-you-can-stop-global-warming>
* <http://www.ucsusa.org/global_warming/what_you_can_do/ten-personal-solutions-to.html#.WZur25OGP6B>
* <http://www.greenpeace.org/international/en/campaigns/climate-change/Solutions/What-you-can-do/>
* <https://cotap.org/reduce-carbon-footprint/>
* <http://globalwarming-facts.info/50-tips/2/>
* <http://www.conserve-energy-future.com/stopglobalwarming.php>
* <http://nationswell.com/everyday-habits-environment-sustainability/>
* <http://content.time.com/time/specials/2007/environment/article/0,28804,1602354_1603074_1603132,00.html>

**Calculate Your Carbon Footprint**:

These websites can help you calculate your carbon footprint:

* <https://www.terrapass.com/>
* <https://www3.epa.gov/carbon-footprint-calculator/>
* <http://www.chuck-wright.com/calculators/carbon.html>
* <http://www.nature.org/greenliving/carboncalculator/index.htm>
* <https://www.carbonfootprint.com/calculator.aspx>
* <http://www.conservation.org/act/carboncalculator/calculate-your-carbon-footprint.aspx#/>

The article linked immediately below is a paper evaluating the different types of carbon calculators: <http://www.climatebiz.com/sites/default/files/document/EIARVol28Issue2-3pgs106-115.pdf>.

**Consider Purchasing Offsets**:

If you have taken steps to reduce your carbon footprint, but you still want to do more, one option is to buy carbon offsets. Offsets are often sold by the ton, and they essentially allow you to pay others to reduce to reduce their greenhouse gases. The money may go to fund capture of methane from a landfill that would otherwise have escaped into the atmosphere, or to protect a tropical forest that would otherwise have been destroyed, releasing greenhouse gases. Offsets can be purchased to balance out the emissions from a plane flight, for Offsets are not a perfect option, since it can be difficult to determine what would have happened in the absence of the offset funds. Several types of high quality offsets exist, though, and some offset providers make buying an offset easy to do.

These sources provide valuable information on offsets and can steer you to offset providers.

* <http://www.responsiblepurchasing.org/purchasing_guides/carbon_offsets/purchasing_guide.pdf>
* <http://www.davidsuzuki.org/publications/downloads/2008/Credit_Check_080701.pdf>
* <https://www.nrdc.org/stories/should-you-buy-carbon-offsets>
* <https://climatetrust.org/wp-content/uploads/2014/10/COPEM.pdf>
* <https://climatetrust.org/wp-content/uploads/2013/05/A-Consumers-Guide-to-Retail-Carbon-Offset-Providers-2006.pdf>
* <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6082.pdf>
* <http://www.globalcarbonproject.org/global/pdf/CarbonOffsetWatch_2008.2008%20assessment.pdf>
* <http://www.carboncatalog.org/about-us/>
* <http://www.ecosystemmarketplace.com/articles/voluntary-carbon-markets-a-business-guide-to-what-they-are-and-how-they-work/>

The following links connect to carbon offset providers, and they offer varying options to reduce the carbon footprint of you, your household or your business. We do not endorse any particular offset provider but encourage you to examine these and other providers, and decide for yourself.

* <https://3degreesinc.com/services/carbon-offsets/>
* <https://www.renewablechoice.com/services/carbon-offsets/>
* <https://www.sterlingplanet.com/>
* <https://www.terrapass.com/>
* <https://carbonfund.org/>
* <http://www.nativeenergy.com/how-carbon-offsets-work.html>
* <http://sustainabletravel.org/our-work/our-approach/carbon-offsets/>
* <http://www.bluesource.com/market-makers/environmental-markets/carbon-offset-purchases-sales/>
* <http://www.b-e-f.org/environmental-products/carbon-offsets/>
* <https://www.carboncreditcapital.com/index.php/for-individuals/>