

Details on the Step By Step: Carbon Footprint Challenge¹

Question: What actions REALLY make a difference on Cape Cod to reduce our Carbon Footprint?

Answer:

Too many to mention! So, to narrow it down, we selected these four categories, and the Top 5 Actions to take in each, based on high impact (saving a lot of CO₂) and low cost, using the California Calculator² and/or Paul Hawkins most recent DRAWDOWN³ research. We recommend you pick just 1 or 2 actions at a time, and put a plan in place to create a new habit. Celebrate any of these (and other actions) that you are already taking. Together, we can make a difference⁴ by lowering our Carbon Footprint by 25% by 2020 and 43% by 2030 in alignment with our MA state goals, which aim to get us to 100% Renewables by 2050.

FOOD & SHOPPING ACTIONS (Average Cape Codders produce 20 tons of CO₂ annually (7 tons of Food & 13 tons Shopping))

1. Eat a low carbon diet. Increase plant-based foods (fruits, vegetables, legumes & grains). Decrease animal foods, especially red meat & dairy products as this accounts for 1/3 of all Food emissions. Avoid products made with palm oil, e.g. snacks, desserts, shampoos & soaps.

Savings: 2 tons of CO₂ annually

Costs: None. Instead, savings of \$1000 annually by replacing animal products with more plant-based foods.

2. Buy Local and Go organic (when you can)

Savings: Buying local saves carbon re transportation of food. Buying organic food greatly helps to reduce chemical toxins in the environment and encourages sustainable farming practices.

¹ This info has been categorized for Cape Cod residents, using the California Cool Calculator TAKE ACTION page as well as the book DRAWDOWN by Paul Hawkins. These are numbers based on average Americans on Cape Cod in mid 2017. **Compiled by the Unitarian Church of Barnstable's Green Sanctuary 10/17/17.**

² <http://www.coolcalifornia.org/calculator-households-individuals>

³ www.drawdown.org/

⁴ Many Individual Households in MA can make a 10-35% reduction in our carbon footprint NOW; it's also key that we each support climate friendly policies and elect public officials taking a strong leadership role in climate justice.

Costs: minimal cost for buying local; organic is estimated to cost \$380 annually for 2 people.

3. Reduce food waste and trash by 25%; create a compost pile or bin

Savings: ½ ton of CO2 annually from methane

Costs: \$0-99 if you buy a composter (plus you SAVE money by not throwing away food).

4. Reduce overall consumption. Ask “Do I really need this?” Find ways to Reduce, Reuse & Recycle

Savings: untold tons of CO2

Costs: \$0 and untold \$\$ saved by fewer purchases & shopping trips.

5. When shopping chose products with minimal packaging. Remember your Reusable Grocery Bags!

Savings: untold tons of CO2

Cost: \$0

TRANSPORTATION ACTIONS (Average Cape Codders put 14 tons of CO2 in the atmosphere via Transportation)

1. Make your next car an Electric Vehicle, or at least a hybrid

Savings: 2-6 tons of CO2 annually

Costs: \$2000-16000 upfront; \$0 if you go the next step and choose not to purchase another vehicle at all.

2. Reduce air travel

Savings: every two-hour flight taken is equivalent to a month of typical driving. (see Drawdown)

Cost: \$0, plus you can consider more train rides or “stay-cations”.

3. Reduce everyday driving impact. Don’t let vehicles idle. It's better to turn engines off and on again. Practice eco-driving by driving 5 to 10 miles slower, combine trips, carpool, and telecommute.

Savings: 1-3 tons of CO2 annually

Cost: \$0 plus savings in fuel consumption & vehicle maintenance.

4. Maintain vehicles (tire inflation, oil changes, etc.)

Savings: up to 1 ton of CO2 annually

Costs: \$225/annually (and it extends the life of your vehicle).

5. Take public transportation and/or walk or bike

Savings: ½ - 1 ton of CO2 annually (if both are adopted)

Costs: a round trip bus to Boston is \$47 (but you save on gas and parking fees).

HOME ENERGY ACTIONS (Average Cape Codders put 13.5 tons of CO2 in the atmosphere via Home Energy)

1. Purchase green electricity

Savings: over 6 tons of CO2 annually

Costs: \$0 to 3 cents extra per kwh.

2. Go Solar (Install PV panels, solar hot water heater or solar skylights)

Savings: over 6 tons of CO2 annually

Costs: \$20K or more to purchase with a 10 year pay off. Fed/State incentives can shorten the payback period. Or, you can lease for \$0 down.

3. Get a **free** energy audit from Cape Light Compact (<https://www.masssave.com/> or 1-866-527-SAVE (7283)).

Savings: 3-6 or more tons of CO2 annually once you implement the recommendations

Costs: varies by household, but some improvements are at no cost, e.g. energy efficient lighting, or reduced cost if incentives apply, e.g. improved insulation.

4. Turn thermostat down in winter/up in summer; easy to do with a programmable thermostat!

Savings: .75 tons of CO2 annually as heating is the largest single contributor to energy use in typical homes

Cost: \$0; in fact, you'll save approximately \$120 annually.

5. Manage the power settings on computers and monitors (put in hibernate, sleep mode or turn off at night; unplug when on vacations)

Savings: .5 tons of CO2 annually

Costs: \$0 (in fact it can save \$ on electricity bills).

WATER RELATED ACTIONS (Water quality and use of water on Cape Cod is key; Average Americans use 60% of their water indoors, 30% outdoors and 10% through leaks)

1. Conserve water indoors by turning off faucets, take shorter showers, use cold water for washing clothes

Savings: use up to 45% less water

Costs: \$0

2. Purchase more efficient toilets, faucets, showerheads, dishwashers and washer/dryers. Be sure to buy Energy Star rated appliances, when your current ones need replacing

Savings: unknown tons of CO2

Costs: \$200-2000

3. Reduce non-essential watering by decreasing lawn area. Water lawn less often, but for longer periods of time. Landscape with trees, native drought resistant plants and other natural features.

Savings: unknown tons of CO2. Save \$ on energy bills due to shade from trees and plants. Plus, additional trees and shrubs remove more CO2 from the air.

Cost: variable depending on choices; improved landscaping enhances the value of your home.

4. Use organic lawn & plant care products & strategies vs herbicides and pesticides.

Savings: unknown tons of CO2 and it protects the aquifer and ocean.

Cost: typically saves \$.

5. Maintain your septic system. Learn the impact of your waste on the aquifer and ocean or bay (do not use a garbage disposal, avoid 2-ply tissue)

Savings: unknown tons of CO2

Cost: typically saves \$ and reduces the # of times you need to clean or replace your septic.

Overall, the Average Cape Codder will emit over 45,000 tons of CO2 annually. If you would like to measure your actual Carbon Footprint go to : <http://www.coolcalifornia.org/calculator-households-individuals>

And, if you would like your information tracked in the Unitarian Church of Barnstable's Step By Step Carbon Footprint Challenge, go to:

https://docs.google.com/forms/d/1txXOyvGPGGlyJWXhaOUNDPSbDZn9QKU2Fw45NsoHmk/viewform?edit_requested=true#responses

or, reach out to Susan Starkey at starkey.susan@gmail.com or Sue Wall Oleyer at suewall@snet.net