

Low Carbon Diet

A Program to Lose 5000 Pounds



...save money ...save energy ...save the planet
Be part of the climate change solution!



Alaska Center for the Environment

THE LOW CARBON DIET

Climate change is changing our world. Severe storms, disappearing sea ice, vanishing glaciers, melting permafrost, and heat waves are becoming commonplace. As individuals living on the planet at this moment in time, we face a challenge no generation has ever had to face. We need to dramatically change the manner in which we use the Earth's natural resources. And we need to do this soon or we will increase the severity of climate-induced natural disasters.



The primary cause of climate change is carbon dioxide (CO₂) emitted into the atmosphere through the burning of fossil fuels which we use to power our cars and homes and produce the goods we consume. The typical US household generates 55,000 pounds of CO₂ annually. Taken collectively, US households directly produce about 8% of the planet's carbon dioxide emissions, and through our purchases we are indirectly responsible for another 17%. By contrast, the typical German household contributes 27,000 pounds and the average Swedish household's contribution is only 15,000 pounds. Clearly, we have much room for improvement.

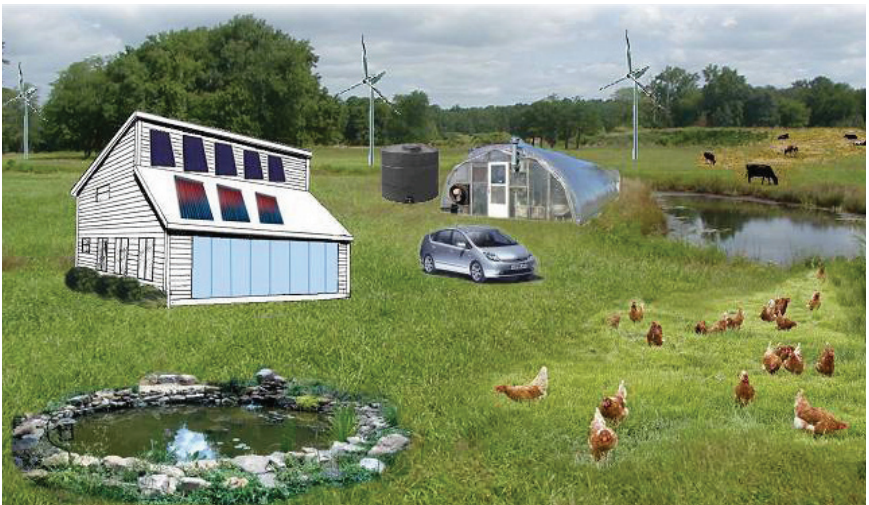
If the bad news is that we are a major part of the problem, the good news is that we can also be a major part of the solution. By making specific changes to actions we take every day, we can significantly reduce our CO₂ emissions. If you're among those who understand the seriousness of our plight, you probably feel called to do something about it. And like a lot of us, you're now asking: Which are the important actions to take? How do I take them? And if I do take them, will it really make a difference?

Alaska Center for the Environment's Low Carbon Diet will answer those questions. It will show you how you can make enough adjustments to your lifestyle to reduce your annual CO₂ output by at least 5,000 pounds. Getting rid of 5,000 pounds of CO₂ in your "diet" is equivalent to what 200 trees can absorb in one year. And if 200 households in our community take the Low Carbon Diet, losing a minimum of 5,000 pounds of CO₂ each, we can reduce our CO₂ emissions by 1 million pounds!

Preventing one million pounds of CO₂ emissions from entering the atmosphere is the equivalent of taking 100 cars off of the road for an entire year. If we reduce our CO₂ footprint, we can have a disproportionate influence in turning the tide on climate change. When we, the consumers and voters, become part of the climate change solution, businesses and politicians will not be far behind. As the saying goes, when the people lead, the leaders will follow. And as America—the planet's greatest contributor to climate change—takes responsibility for reducing its carbon footprint, the impact will inevitably ripple out.

HOW THE PROGRAM WORKS

- Sign up for the Low Carbon Diet, either in person or online at: <http://akcenter.org/climate-energy/climate-change/low-carbon-diet>.
- Create an action plan! Select from the menu of actions in this guide those that help you reduce your CO₂ emissions.
- Each action in this guide indicates the pounds of CO₂ your household can save in one year. Whatever your emissions at the start of the program, you are encouraged to select actions to help you achieve a 5,000 pound reduction or greater.
- An ACE staff member will check in with you mid-program so you can report on the actions you took. Staff will also provide support and inspiration for you to carry out your action plan.



CO2 REDUCTION ACTIONS

1. REDUCE SOLID WASTE

To reduce packaging, bring your own cloth bags when shopping, buy in bulk, purchase items with the least packaging, and buy reusable items. To reduce junk mail, email: www.DirectMail.com/Junk_Mail. Request that they remove your name from all 3rd class mailing lists. For the purposes of calculating your solid waste in gallons for your action plan, a standard trash can, shown on the right, is 20 gallons.



2. REDUCE HOT WATER USED IN SHOWERS

Purchase and install a low-flow showerhead. Time your average shower and reduce this time so you are consistently at 5 minutes or less.

3. REDUCE WATER USED FOR DISHES

Run the dishwasher only when you have a full load. Don't rinse dishes before loading and push "air dry" rather than "heat dry". For hand washing, wash dishes in a tub of soapy water and fill a second tub for rinsing dishes.

4. WASH AND DRY CLOTHES EFFICIENTLY

Wear clothes until they are dirty. Use a wet cloth to get a spot out when the rest of the garment is clean. To save energy, wash only full loads using cold water, and dry only full loads or use a clothesline. Buy a front-loading machine: they save energy by reducing the amount of water used in each load by about 50%

5. TURN DOWN THE HEATING THERMOSTAT

Home heating accounts for 1/4 of your energy bill. Consider installing a programmable thermostat so you can make sure the temperature is set between 65°-68°F during the day (sweater temperature) and between 55°-58°F at night (blanket temperature).

6. PLUG YOUR ELECTRICITY LEAKS

Many appliances use electricity even when turned off. Plug computers, TVs, and DVDs recorders into a power strip and turn off the power when not in use. When you buy new equipment, look for the Energy Star® label.

7. EAT AND DRINK SMART

Look for opportunities to eat more vegetarian meals. Substitute your store-bought food with food from your garden, local farms, and wild foods you can harvest: wild game, fish, berries, etc. Eat out less. Restaurants are very energy-intensive, requiring about five times as much energy per square foot as your home.



8. SMART SNOW REMOVAL

Skip the emissions generated by plowing and start shoveling! An added benefit is increased fitness. Snow shoveling is considered moderate to vigorous exercise. An average person can burn almost 250 calories in 30 minutes.

9. WORK EFFICIENTLY

Consider trading in your desktop for a laptop: a laptop uses far less energy. Speak to your employer about taking actions in this guide, and ask for their support. Make it a goal to have your workplace take one or more actions from this guide. Volunteer your time to help bring the action(s) about.

10. TRAVEL SMART

On average, the CO₂ equivalent impact of flying per passenger on a plane is something like driving a single occupancy vehicle that gets less than 10mpg between the same two points. That adds up fast! Consider flying less, driving instead of flying, and/or offsetting your air travel (see #18: Neutralize Your CO₂ Footprint).

11. DRIVE EARTH SMART

Create a plan to reduce your household's vehicle miles. Telecommute, carpool, walk, or bike to work 1-2 days a week. For shopping, buy in larger quantities and combine with other trips. For children's school activities, carpool with other parents. To practice fuel efficient driving, maintain a steady speed, when appropriate, between 45-55 mph. Anticipate stops and slowdowns, decelerating steadily to save gas.

12. PLAY SMART

Take advantage of our incredible trail systems and walk, jog, hike, and ski while enjoying the beautiful surroundings. Ski resorts and exercise gyms are energy-intensive. The great outdoors is not!

13. MAKE YOUR H₂O HEATER MORE EFFICIENT

Set your heater to 120°F, and turn the water setting to "off" before a trip. Insulate the first 5 feet of hot water pipes with foam sleeves. If your heater was made before 1989 install an insulating blanket. (Note: Do not install insulating blankets on gas water heaters!)

14. INSTALL ENERGY EFFICIENT LIGHT BULBS

Compact fluorescent light bulbs use about 70% less energy than the old incandescent bulbs. Make sure to replace incandescent bulbs with compact fluorescent ones for lights on at least 3 hours a day. Always turn off the lights when you leave the room and only light the parts of the room where you need it.

15. SEAL AIR LEAKS

Use a candle to help locate cold air leaks. Install weather stripping, outlet insulators, caulking, insulating foam, window putty, and door "sweeps" where needed.

16. TUNE UP YOUR FURNACE

Oil furnaces need a tune-up every year; gas furnaces need one every 2 years.

17. ACHIEVING MAXIMUM ENERGY EFFICIENCY

Update your appliances to those that are more energy efficient. Learn about how to participate in the Alaska Housing Finance Corporation's (AHFC) Home Energy Rebate Program at www.akrebate.com.

18. NEUTRALIZE YOUR CO₂ FOOTPRINT

Contact the following websites for information on tree planting: www.arborday.org; www.plant-trees.org. For a list of criteria for evaluating carbon offsets and places to purchase them visit: www.cleanair-coolplanet.org/ConsumersGuidetoCarbonOffsets.pdf. For purchasing carbon offsets to compensate for air travel emissions, see: www.betterworldclub.com or www.flyneutral.org.

19. PASS IT ON

Tell your friends and family about ACE's Low Carbon Diet Program. In person is always best, followed by a phone call. Support people who participate with a call or email. Consider hosting a Climate Change Cafe in your neighborhood or community.

ACTION PLAN

ACTIONS (Circle actions you will do)	POUNDS YOU CAN LOSE ANNUALLY BY DOING ACTION	POUNDS REDUCED BY END OF PROGRAM
1. REDUCE SOLID WASTE Reduce solid waste from 90 gallons to 60 Reduce solid waste from 60 gallons to 35 Reduce solid waste from 35 gallons to 20 Recycle 100%	3420 lbs 2600 lbs 1560 lbs 1300 lbs	_____ _____ _____ _____
2. REDUCE HOT WATER USED IN SHOWERS Install low-flow shower heads Reduce shower time to 5 minutes	250 lbs 300 lbs/person	_____ _____
3. REDUCE WATER USED FOR DISHES Reduce dishwasher use per week Adopt hand dishwashing habits Purchase Energy Star® dishwasher	100 lbs/ea. load less 125 lbs 125 lbs	_____ _____ _____
4. WASH AND DRY CLOTHES EFFICIENTLY Reduce warm or hot wash loads per week Reduce number of weekly dryer loads Purchase an Energy Star® front load washer	100 lbs/ea. load less 260lbs/ea. load less 500 lbs	_____ _____ _____
5. TURN DOWN THE HEATING THERMOSTAT Set thermostat to 65-68 when at home and active; set to 55-58 at night & when not at home	1400 pounds	_____
6. PLUG YOUR ELECTRICITY LEAKS Turn off or unplug your appliances	600 pounds	_____
7. EAT AND DRINK SMART Switch to veggie meals 1+ days per week Reduce frequency of eating out Eat food grown in Alaska at least 3x/week Switch from bottled water to tap water Drink beer instead of wine Drink one less cup of coffee a day	700 lbs ea. day 15 lbs/restaurant meal 440 lbs 1 lb/bottle 3.7 lbs/bottle 146 lbs	_____ _____ _____ _____ _____ _____
8. SMART SNOW REMOVAL Use a shovel instead of a snowplow truck	950 lbs/winter	_____
9. WORK EFFICIENTLY Trade your desktop computer for a laptop Get your workplace to take the Low Carbon Diet	700 lbs _____ lbs	_____ _____
10. TRAVEL SMART Reduce # of short flights (250 miles or less) Reduce # of medium flights (250-800 miles) Reduce # of long flights (800+ miles)	0.64 lbs/flight mile 0.45 lbs/flight mile 0.39 lbs/flight mile	_____ _____ _____
TOTAL		_____ _____

ACTION PLAN

ACTIONS (Circle actions you will do)	POUNDS YOU CAN LOSE ANNUALLY BY DOING ACTION	POUNDS REDUCED BY END OF PROGRAM
11. DRIVE EARTH SMART Trade your car in for a hybrid car Practice fuel efficient driving Engine tune up & maintain air-pressure in tires Take the bus instead Use your bike or walk instead of using your car	4000 lbs 1100 lbs/vehicle 1500 lbs 10 lbs/bus ride 1 lb/mile walking	_____ _____ _____ _____
12. PLAY SMART Go X-country skiing instead of lift-service skiing Hike and run outside instead of hitting the gym	45 lbs/day 21 lbs/visit	_____ _____
13. MAKE YOUR H2O HEATER MORE EFFICIENT Set your heater temperature to 120 degrees Insulate your hot water heater Install a solar hot water heater	150 lbs 175 lbs 2500 lbs	_____ _____ _____
14. INSTALL ENERGY EFFICIENT LIGHT BULBS Replace incandescent light bulbs with compact fluorescent bulbs	100 lbs/bulb	_____
15. SEAL AIR LEAKS Thoroughly seal air leaks in your home	800 lbs	_____
16. TUNE UP YOUR FURNACE Tune up your furnace Seal and insulate warm-air heating ducts Purchase an energy-efficient furnace	300 lbs 800 lbs 2400 lbs	_____ _____ _____
17. ACHIEVING MAXIMUM ENERGY EFFICIENCY Sign up for AHFC's Home Energy Rebate Program Insulate your walls and attic Install high-efficiency windows Install Energy Star refrigerator	1000 lbs 1200 lbs 800 lbs 500 lbs	_____ _____ _____ _____
18. NEUTRALIZE YOUR CO2 FOOTPRINT Plant trees Purchase carbon offsets Purchase travel offsets	25 pounds/tree As much as you can! As much as you can!	_____ _____ _____
19. PASS IT ON Encourage someone you know to take the Low Carbon Diet	5000 lbs/household	_____
Total from this page Add total from facing page = TOTAL POUNDS OF CARBON DIOXIDE LOST!		_____ _____ _____



For more information about
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Information in this guide was collected from The Empowerment Institute's Low Carbon Diet workbook, the Sophis Foundation's Carbon Footprint Counter, the Brighter Planet's American Carbon Footprint guide, the World Resources Institute Working 9 to 5 on Climate Change guide, and Save My Ocean's Carbon Calculator. Complete references can be found at <http://akcenter.org/climate-energy/climate-change/carbon-calculations>



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