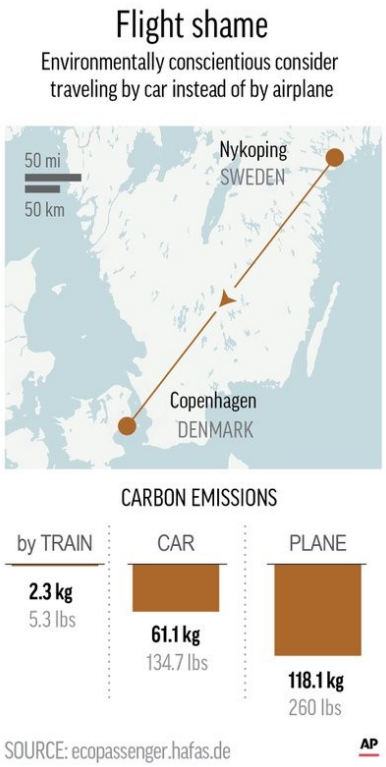
Striving for Sustainable Transportation

Transportation accounts for 28% of the average American's carbon footprint, and according to the Union of Conserved Scientist, 92% of that comes from motor vehicles.

Reducing transportation emissions can be achieved in two ways: by conservation and shifting away from fossil fuels.

1. ***Conserve***: Don't drive -take public transit; Replace inefficient vehicles; Reduce (better yet eliminate) long distance travel. Choose your means of long-distance travel to minimize the damage to the climate. For single travelers, trains are best, planes are worst.

Flight Shame - comparing train, car and plane emissions



The trip in this illustration, across Sweden, cost a little more than 5 pounds of carbon emitted if it's taken by train. This compares to almost 135 lbs. by car and 260 pounds by plane. Such amounts quickly take a big chunk out of the annual carbon budget of 4,409 pounds per person that scientists say would be sustainable.

If you are traveling with a group, packing a number of people into a high MPG vehicle can make car travel more efficient. The Union of Concerned Scientists calculate that 4 people in a Prius is the most climate friendly way to travel (among choices that emit carbon)

CO2 Emissions per 100 Passenger Miles

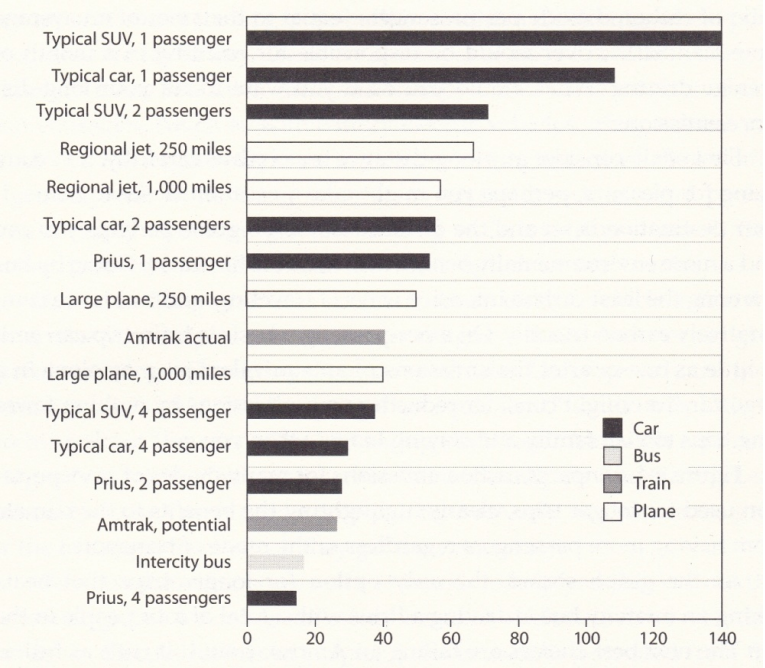


Illustration from: *Cooler, Smarter* p.76

Of course, ***the best way to travel anywhere is by zero emission vehicle.***
This leads us to #2

2. ***Shift from combustion sources of energy to non-combustible sources.*** Bicycles and electric vehicles (EVs) emit zero emissions. And, if you are ***making electricity from the sun or wind*** and using that energy to charge your EV, your footprint can be close to zero. Plug-in Hybrid Electric Vehicles (PHEVs) also reduce greenhouse gases and other emissions, even if the source of electricity is mostly coal.

   Think of ways to abandon your gas car and use a bike. In my case, the environmental and financial benefits were enormous, with savings of over 6,000 pounds of carbon emissions and almost $2,000 each year.

   Avoid vehicles that use combustible renewables (biodiesel, ethanol) .

   My EV avoids about 7,000 pounds of carbon emissions annually and a dollar savings of about $500 annually when compared to an equivalent gas car. The downside (if you want to call it that) is on the behavioral side. It takes time and energy to plan longer trips. Emotionally these "inconveniences" are well worth the good feelings we get by running clean and passing gas stations by.

Want more ideas on how to fight global warming? Look at FLVCS's climate change report. *Urgency and Action: Drawdown to Reverse Climate Change.* https://tinyurl.com/Urgency-In-Action