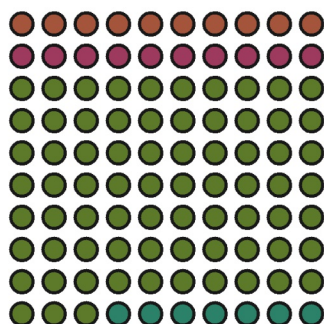






**11**   
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## High Impact Action: Live car free

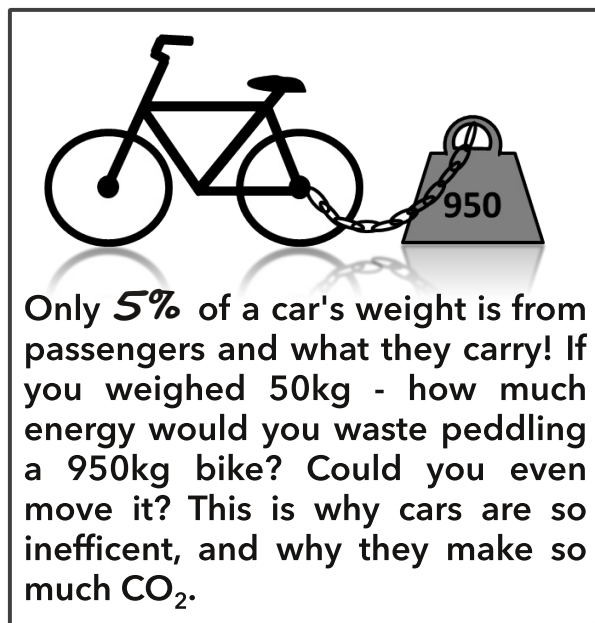
### Can't I just get a hybrid?

If you don't drive your car much, you won't burn much carbon, right? Wrong! The average car makes about 100 tons of CO<sub>2</sub>, starting when it's in the factory until you stop driving it. And 10 tons alone is used to manufacture the car. That's more CO<sub>2</sub> than two people in Ecuador produce in a whole year! Getting a car means lots of emissions - there's just no way driving around it!



 Manufacturing  
 Refining the fuel  
 Running the vehicle  
 Maintenance/other

Total=100.23



### Young people travel light

Far more young people in North America are choosing to go without a car than their parents' generation did at the same age. They do this by living close to where they work, in walkable neighbourhoods with good public transit. Using cellphones to figure out bus and train schedules makes their lives even easier. If there aren't bike lanes or good transit in your area then talk to your city councillor to get changes!

### Parks vs parking lots

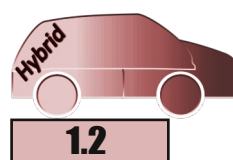
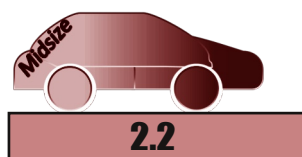
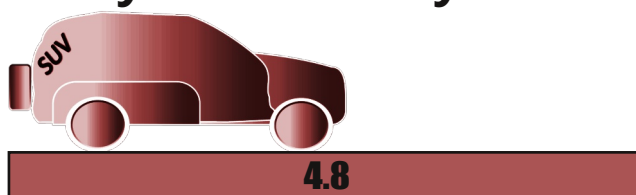
In cities made for cars, space that could be used for parks, shops and community centres is occupied by highways and parking lots. Vibrant cities are walkable!

\$11 000 - That's how much the average Canadian spends on transportation per year, and almost all of it is for personal vehicles. Using alternatives can save you thousands every year.

Stay fit! Each additional hour spent in a car per day adds 6% to the chance of becoming obese.

Cars create pollution and smog that's bad for our health.

### If you absolutely have to...



If you must have a car, then get one that's fuel efficient, share it, and drive as little as possible. This diagram shows the tonnes of CO<sub>2</sub> produced per year driving each vehicle. How much do you save by getting a hybrid instead of an SUV?

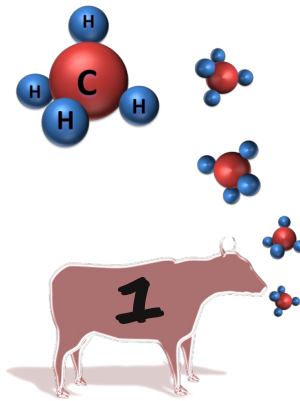


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## High Impact Action: Plant-based diet

Researchers have calculated that if we only grew crops to feed people (not for livestock or biofuels), we would create enough new calories for an extra **4 billion** people on Earth. With the world's population still expanding, it's time to think about changing our diet.

Cows produce a large amount of methane, or  $\text{CH}_4$ , which is a very strong greenhouse gas. In fact, this digestive process created the equivalent of **2 billion tonnes** of  $\text{CO}_2$  in 2010. More than all of Canada put together!



It takes ten calories from plants to make one calorie of meat. That means extra land is used to feed animals that could be used for people. This requires more fertilizers, pesticides and deforestation than a system without meat.



### Won't someone else just buy the meat?

Every time you buy a product you send a price signal to the company selling it, telling them to produce more. Boycotts work because enough people refusing to buy a product sends a strong message and changes what a company makes. And it goes both ways: there are four times more chickens in the world than fifty years ago because people eat more meat than they used to. What you buy matters - meat included.

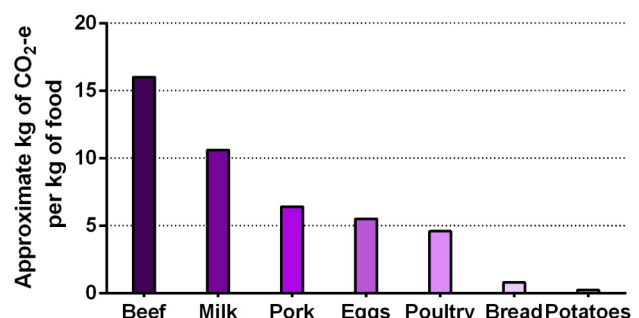
### Reasons to eat green

In recent years many news articles and films have documented inhumane conditions for animals in factory farms and slaughterhouses. If you're worried about animal cruelty then a plant-based diet is a reasonable first step.

Vegetarians also have a lower risk of death from heart disease, as well as lower rates of diabetes and cancer.

### If you have to...

If you can't go without meat, try to choose poultry (chicken and turkey) over cow products. As you can see on the right, it can make a huge difference to your carbon footprint. You won't find fish on the graph because they can be anywhere between potatoes and beef (0.7 to 14kgCO<sub>2</sub>e/kg).

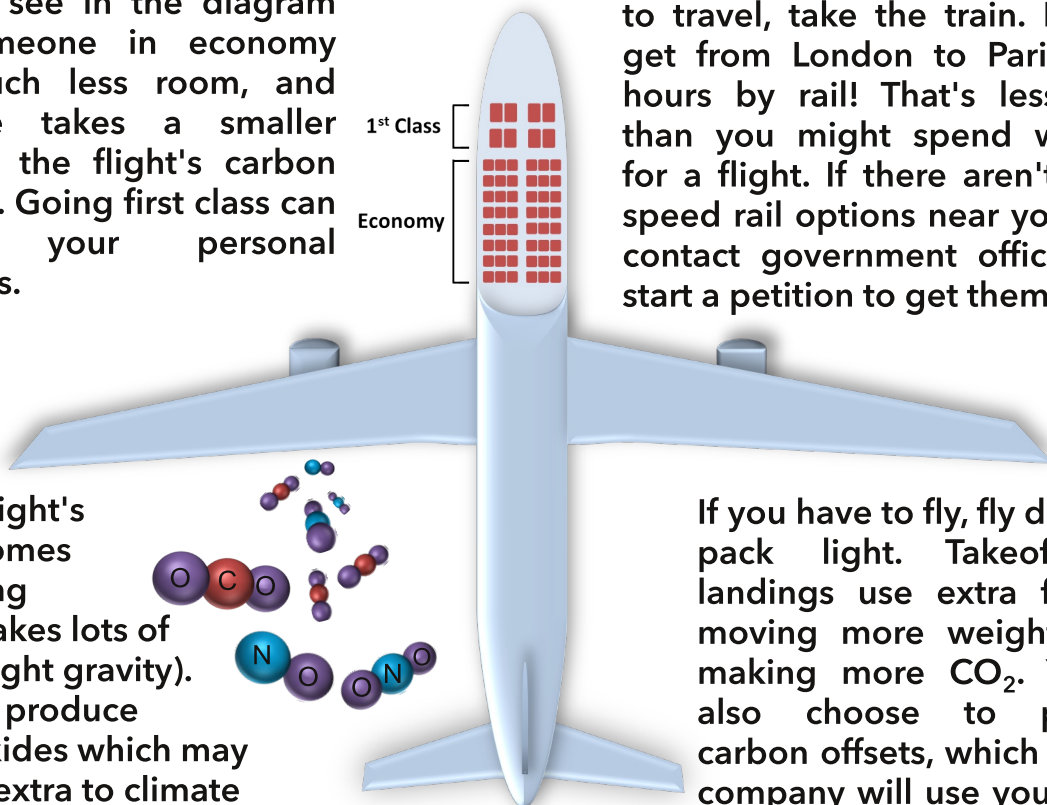


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## High Impact Action: Avoid air travel

As life becomes faster-paced, it can be worth slowing down to enjoy the journey.  
 What sights and sounds might you miss when you're high in the air?

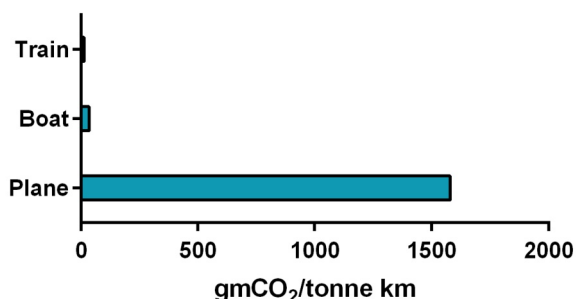
Carbon calculators will sometimes ask if your seat was economy or first class. You can see in the diagram that someone in economy uses much less room, and therefore takes a smaller share of the flight's carbon footprint. Going first class can double your personal emissions.



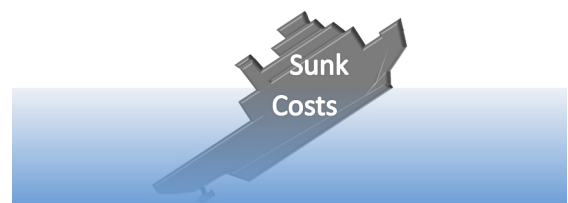
Most of a flight's footprint comes from burning jet fuel (it takes lots of energy to fight gravity). Planes also produce nitrogen oxides which may contribute extra to climate change because they are released in the upper atmosphere. We're not sure how strong their warming effect is, but it's worse than CO<sub>2</sub> would be on its own.

Use webcams to stay in touch with family and take vacations close to where you live instead of flying. Then, when you need to travel, take the train. People get from London to Paris in 2 hours by rail! That's less time than you might spend waiting for a flight. If there aren't high-speed rail options near you then contact government officials or start a petition to get them.

If you have to fly, fly direct and pack light. Takeoffs and landings use extra fuel and moving more weight means making more CO<sub>2</sub>. You can also choose to purchase carbon offsets, which means a company will use your money to plant enough trees or install enough renewable energy to cover your emissions.



This graph shows how much carbon dioxide is emitted in order to move one tonne of material a full kilometer using different methods. You can see now why trains are so climate-friendly and why flying is the least eco-friendly way to travel.



Though we might develop low-carbon flight in the future (biofuels, liquid hydrogen) for now we have "sunk costs" in our system. This means airports and planes are designed for fossil fuels, and no one wants to abandon expensive equipment if it still works. If you're waiting for sustainable air travel, don't hold your breath.



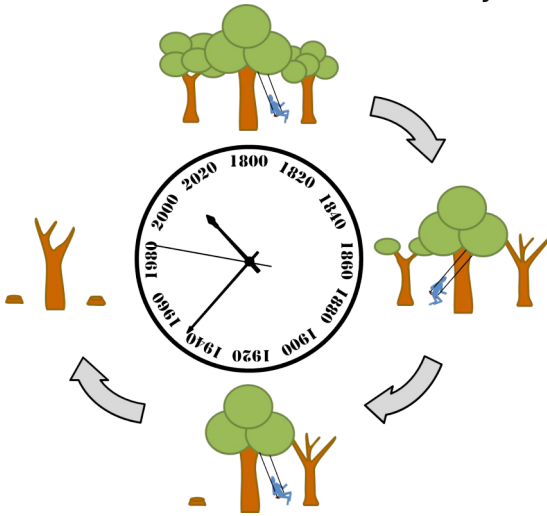
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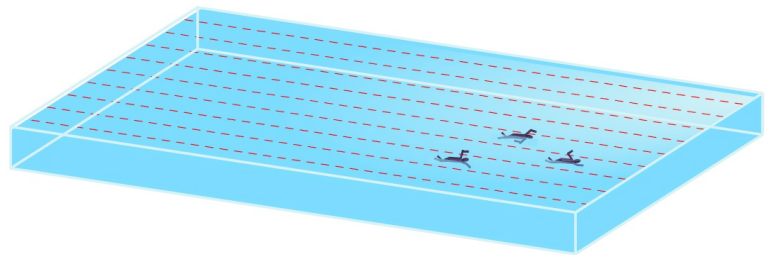
## High Impact Action: Have a smaller family

Decisions around family size are deeply personal and among the most life-changing choices an individual can make. They are also very important decisions for the planet.



Intergenerational justice means being fair to future generations. This requires us to leave them with the same resources and the same healthy planet that we got when we were born. It's never fair for one person to live in another person's mess. You can contribute to intergenerational justice by voting for politicians who care about the environment or joining organizations that promote sustainability. Whether you have kids or not, it's an idea worth considering.

In one lifetime a person can expect to use the equivalent of 1870 barrels of oil for their energy needs, eat 1185 chickens and produce 10.4 million kg of waste water (that's 4 Olympic swimming pools of waste).

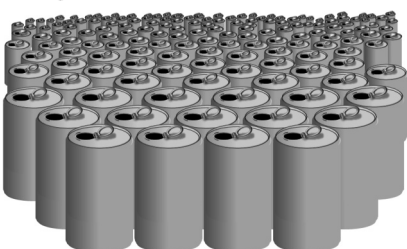


Parents can contribute to a safer planet for their children by picking low-carbon ways to eat and move around (biking, public transit and a plant-rich diet). Others may choose to be 'childfree' so that they can focus on their career or keep their personal freedom. Research has shown that young adults sometimes even consider not having kids because they are worried about raising children on a polluted planet.

*If it is irresponsible, in a warming world, for an individual to drive a Hummer that gets six miles per gallon of gasoline, it is irresponsible for him to father six children—each of whom will generate much more greenhouse gas emissions during the course of his or her lifetime than the car. - Philip Cafaro*

Do you agree with this statement? Are having children and owning a car comparable? Why or why not?

### 12 000 000



To offset the carbon emissions that one American will produce in their lifetime, you would have to plant 6700 sugar maple trees or recycle 12 million aluminum cans. For most people, choosing to have one fewer child is the action that will have the greatest impact on the environment.