

Flying Green

How To Protect the Climate & Travel Responsibly

Guidelines developed by the Tufts Climate Initiative, 1-31-2007



Say you are a European musician who is on tour in the US, or a researcher from Boston who needs to attend a conference on the West coast, or you just would like to visit your grandmother who lives back in India. With air travel still being cheap, you will probably not think much and just book a flight to that the destination. Some of us fly so frequently, we can even afford to upgrade to business class at no extra cost.

With Al Gore's movie 'An Inconvenient Truth' and the aftermath of hurricane Katrina, many of us have become more sensitized to the serious threats of climate change. If you travel frequently, air travel, unfortunately contributes a disproportionate amount of greenhouse gases to your personal climate change footprint.

Here is an example: the average American is responsible for the emissions of about 20 tons of CO₂ annually, the average European or Japanese for about half that.

If you fly to Europe and back from the US, you'll add about 3-4 tons to your (already large) carbon footprint. With one flight you will have caused more emissions than 20 Bangladeshi will cause in a whole year. Unfortunately they are the ones who will lose their homes and livelihood once sea level rise inundates their low lying country. Yet there are many ways to minimize travel emissions.

The bottom line:

If you have a choice, don't travel.

For your job, use video conferencing, e-mail and phone whenever possible. And for your vacation, choose a location nearby. Because remember, every time you fly to Hawaii or the Caribbean or some other exotic beaches, your air travel will contribute to the bleaching and dying of the coral reefs you wanted to admire there.

If you do need to travel:

Take the train or bus. You will reduce your emissions by 3-7 times over taking an airplane.



If you need to travel by airplane:

Use the most direct route possible.

Take-off and landing require most fuel.

Fly economy instead of business class.

Less leg-room means room for more people. That means fewer emissions per person. That same flight to Europe and back will produce about 1.5 times more CO₂ for a person flying business class.



Buy carbon offsets.

If you buy carbon offsets, you forgo reducing your own emissions (i.e. you still fly) but in exchange you pay someone to reduce their emission in your stead.

Many companies nowadays offer individuals a way to conveniently buy carbon offsets on-line. Individuals can calculate the amount of carbon they are personally responsible for and then purchase an offset for that amount. The companies then use the funds to invest in projects that help reduce greenhouse gas emissions, such as building windmills, installing solar water heaters, or retrofitting buildings with more efficient lighting.

You can expect to pay \$5 - \$ 20 per ton of CO₂ offset, depending on the company you choose. But price should not be the only factor that influences your choice of company.

Most important are the following questions:

1. **Does the company invest in projects that truly reduce emissions and at the same time benefit the local population and ecosystems?**
2. **Are your emissions calculated correctly?**
3. **Does the company work transparently?**
4. **How is your money used?**

The Tufts Climate Initiative has evaluated 13 voluntary offset companies. There are many more that we did not get a chance to evaluate. On the next page are some guidelines that will help you choose the right company.

1. Does the offset company invest in projects that truly reduce emissions and at the same time benefit the local population and ecosystems?

Look for the **Gold Standard**. Currently, this is the strictest available standard.

Avoid forestry projects (called *sequestration projects*). Although protecting forests is very important, protecting them so they absorb carbon is an iffy proposition. We know little about how forests store carbon in the long run, especially with the predicted climatic changes. By all means, donate money to organizations that help protect forests but for carbon offsets, invest in projects that help us transition away from fossil fuels, such as energy efficiency and renewable energy projects.

Third Party Verification. Ask your offset company if they use Third Party Verification to ensure the quality of carbon offsets.

Additionality. In theory, “additionality” answers a very simple question: Would the project have been implemented, even without the sales of the carbon offsets? If the answer is yes, the project is not “additional.” Carbon offsets from such a project don’t really offset your emissions. Ask your offset company how they account for additionality in their carbon offsets!

Example of Additionality:

You fly a lot and would like to offset your emissions.

Scenario 1: Your friend needs a new car and wants to buy the most fuel-efficient model to save money on fuel but cannot afford the price premium. So you strike a deal with him: You pay the \$2000 price difference between the regular and the most fuel efficient model. In return you can claim all the carbon benefits from the improved gas mileage while your friend saves money on gas. This transaction is “additional”: Your friend was only able to purchase this car because you paid the \$2000 premium.

Scenario 2: Your friend just bought a new car. He chose the most fuel-efficient model to save money on fuel. You now offer to give him \$2000. In return you would like to claim the carbon benefits of his fuel savings. Even though the result is exactly the same in both examples, Scenario 2 is “non-additional” because your friend chose to buy the most fuel efficient model independent of your payment to him.

2. Are your emissions calculated correctly?

Not all air travel emissions calculators are equally accurate. Here is a rule of thumb: A US return flight from coast to coast produces about 2-3 tons of CO₂ emissions per passenger; a flight from the East coast to Europe and back produces about 3-4 tons of CO₂ emissions per passenger. If the emissions calculator comes up with a much lower number, it is underestimating your emissions.

3. How is your money used?

Ask the company how much of your money will go directly towards the project. Then find out what exactly is included in the project (advertising, broker fees, outreach, staff salaries, etc.).

4. Does the company work transparently?

Look carefully at the company’s website. Do they list the projects in detail? Do you get a good sense of how they’ll use your money?

If you have a limited budget, choose the company with the best projects and pay them as much as you can afford to pay. Ultimately, it is better to offset fewer of your emissions but invest in offset projects that are of high quality.

Voluntary carbon offsetting will not save us from climate change.

If we want to avoid catastrophic effects, we must act swiftly and boldly to pass legislation to dramatically reduce greenhouse gas emissions. The time to do this is very short. Here is how you can most meaningfully and effectively help protect the climate:

- 1. Reduce your travel miles and live a less energy-intensive lifestyle in general – e.g. live in an apartment close to work, use public transportation, eat less red meat, and get your house insulated.**
- 2. Be politically active: vote officials into office who enact legislation that effectively address the threats of climate change.**

These actions will ultimately be more important than buying carbon offsets. On the other hand, carbon offsetting can genuinely reduce emissions. Even more importantly, it can help provide funds now to kick start the development of low carbon technologies, which will be vital in the more fundamental transition to low carbon societies.

Companies we liked best:

myclimate

Swiss site: www.myclimate.org/?lang=en

US site: www.my-climate.com

myclimate - The Climate Protection Partnership is a non-profit company based in Switzerland.

atmosfair

www.atmosfair.de

Atmosfair is a German non-profit company focusing on offsetting air travel.

Climate friendly

www.climatefriendly.com

Climate friendly is an Australian-based for-profit company.

NativeEnergy

www.nativeenergy.com

NativeEnergy is a US-based for-profit company.