

Going  
Green

# Traveling Green



by Jacqueline A. Ball

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**by Jacqueline A. Ball**

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# Ready, Set—Go Green!

In today's world, people are always on the go. Whether a trip covers a thousand miles (km) or a few blocks, it requires **energy**. Not all energy is the same, though. The kind of energy that comes from the sun or wind, for example, is **renewable**—it will never run out. The kind of energy that powers most cars, however, is **nonrenewable**. It comes from **fossil fuels** such as oil and gas. Once people use up Earth's supply of these fuels, they can't be replaced. Burning these fuels also pollutes the air and releases harmful **greenhouse gases**, such as **carbon dioxide**, that contribute to **global warming**. If Earth's climate warms up too quickly, the homes of some kinds of plants and animals could be damaged or destroyed.

To protect the planet and preserve energy resources, people need to use more **sustainable** methods of travel—transportation that is less wasteful, cleaner, and depends more on renewable energy. In other words, people need to travel **green**.

## Greenest to Least Green Methods of Travel

Walking, Biking,  
Skateboarding

Mass Transit  
(buses, subways, trains)

Carpooling

Airplanes; cars carrying  
only one passenger



Traveling by means that don't involve engines, such as walking, hiking, biking, and skating, are the greenest ways to go short distances. They are also the healthiest!

# Quick and Dirty

More than four billion people travel by air every year. Planes are the fastest type of transportation, but they're also the worst for the environment. Flying pumps out more pounds (kg) of carbon dioxide per person than almost any other form of travel. Air travel also releases more greenhouse gases higher up in the atmosphere than other forms of travel, which scientists believe speeds up global warming faster than pollution on the ground.



In the United States, two-thirds of all oil that's used goes toward powering vehicles.

Experts say people should travel by train or bus instead of by air whenever possible. Trains are four to ten times less polluting than planes, mostly because they require much less power to move. Buses are also a greener way to travel than planes, with better engine technology and new fuels making them cleaner all the time.



***Airports around the world, such as this one in Boston, Massachusetts, are usually full of travelers.***



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## Bibliography

**Hill, Graham, and Meaghan O’Neill.** *Ready, Set, Green: Eight Weeks to Modern Eco-Living.* New York: Villard (2008).

**McDilda, Diane Gow.** *365 Ways to Live Green.* Avon, MA: Adams Media (2008).

**Sperling, Daniel, and Deborah Gordon.** *Two Billion Cars.* New York: Oxford University Press (2009).

## Read More

**Hall, Julie.** *A Hot Planet Needs Cool Kids.* Bainbridge Island, WA: Green Goat Books (2007).

**Murphy, Glenn.** *A Kid’s Guide to Global Warming.* San Francisco: Weldon Owen (2008).

**Thornhill, Jan.** *This Is My Planet: The Kid’s Guide to Global Warming.* Toronto: Maple Tree Press (2007).

## About the Author

Jacqueline A. Ball is the author of books for kids about science, nature, technology, inventions, history, and many other subjects. She lives in New York City, where she loves to walk everywhere.

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# Traveling Green

In today's world, people are always on the go. Whether a trip covers a thousand miles or a few blocks, it requires energy. A lot of the energy used for travel comes from fossil fuels, such as oil and gas, which will one day be exhausted. In addition, burning these fuels pollutes the air and releases harmful greenhouse gases that can contribute to global warming. To protect the planet, people need to use sustainable methods of travel as much as possible—transportation that is energy efficient, nonpolluting, and uses renewable energy. In other words, people need to travel green. Look inside to find out the surprising steps people are taking to travel in ways that conserve Earth's precious resources and help protect the planet.

**Building Greenscrapers   Eating Green   Making Cities Green**

**Traveling Green   Using Earth's Underground Heat**

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