

Three Easy Steps to Save the Earth

Written by Shao Wei Chia, Johan Alwall
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In recent years, the world has seen an increasing frequency of large-scale disasters; major droughts in the U.S. Southwest, Africa and China; flood disasters in the U.S. Midwest, southern Asia, Europe, and China; wildfires in the U.S. and Europe; and an increased number and intensity of hurricanes and typhoons affecting the Caribbean, the U.S. Southeast and Northeast, and South and East Asia.

Each of these disasters has caused enormous damages, thousands of homes destroyed, families scattered, hunger or starvation from failed crops, not to mention the loss of human lives. There is growing evidence that this increase in disasters can be attributed to human activities, pollution and greenhouse gas emissions.

So what can you and I do about it?! The founder of Tzu Chi, Dharma Master Cheng Yen, has been continuously urging everybody to reduce their environmental impact by living a simpler life.

In fact, this is not as difficult as it might sound. Here are three easy steps to make a real impact for the environment, while at the same time improving our health and quality of life:

- Eat less meat
- Use less air conditioning
- Drive less

Please remember: We did not inherit the Earth from our parents; we are merely borrowing it from our grandchildren.

1. Eat less meat

The livestock sector is responsible for a higher share of greenhouse gases emissions than world-wide transport.¹ Besides the effects of the animals themselves, this is due to the intensive industry surrounding the meat production, including:

- Production of mineral fertilizers from oil, used in feed production;
- Land-use changes for feed production and for grazing;
- Fossil fuel used in transport of animals and feed;
- Fossil fuel used in production and transport of processed and refrigerated animal products.

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What is even worse is that a majority of the crops planted around the world are used to feed livestock instead of feeding people.

To produce one pound of meat, on average 10 pounds of crops are needed,² that could have been used to feed the millions of starving people in the world. For every meatless meal we eat, we reduce the demand for livestock, and therefore contribute to a cleaner and more equitable planet.

Besides the benefits to the environment, vegetarianism has been associated with many health benefits. A vegetarian diet is rich in vitamins, minerals, fiber, and other compounds that provide antioxidant, anti-inflammatory, anti-carcinogenic, and other properties that contribute to disease prevention.³ Vegetarians also tend to consume fewer calories, less saturated fats and cholesterol than non-vegetarians. All these have been shown to improve physical health as well as prevent chronic diseases such as heart disease, diabetes and obesity.

Many might find it difficult to abruptly change from a non-vegetarian diet to a vegetarian diet, but everybody can start off with reducing their meat intake, and work towards vegetarianism. We can all do it!



2. Use less air conditioning

Just to reduce the indoor temperature by a few degrees, we are in fact doing major harm to the planet. Air conditioning has become a part and parcel of our lives. No less than two-thirds of households in the United States own at least one air-conditioning unit,⁴ and these air-conditioners use approximately 8% of all the electricity produced in the United States, at an annual cost of more than \$15 billion to homeowners!

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As a result, 195 million tons of CO₂ are released into the atmosphere. That's an average of almost 2 metric tons per year for each home with air conditioning!

Besides CO₂ emission, the chemicals used in air-conditioners are also very harmful to the environment. The type of refrigerant used in modern air conditioning units, HFC, is considered one of the High Global Warming Potential gases.⁶ In other words, for a given amount, HFCs trap substantially more heat in the atmosphere than CO₂.

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With such shocking statistics, how can we help? In fact, there are many ways we can cut down our dependency on air conditioning:^{5,8}

Improve insulation and air sealing of the house, which prevents heat from entering the house;
Dispose of inefficient electrical appliances as these appliances create excess heat;
Consider "cool" exterior finishes such as light-colored paint and roofing that absorbs less heat;
Cool using air movement and ventilation such as ceiling or house fans;

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Avoid direct sun light on windows by using external window shades; or
Simply open the window at night to let the fresh air in!

If our hearts are calm and content, we will feel naturally cool!

3. Drive less

The number of vehicles in the world is on a steady rise. Already in 2009, there were over 175 vehicles per 1000 people worldwide -- that is 1.2 billion cars!⁹ In the United States, things are even worse - there are on average 1.6 cars for every 2 people, including children! This increase in the number of cars worldwide is truly alarming, since pollution from transport is one of the main factors for air pollution and global warming. For the United States, transportation accounts for the second largest portion (27%) of greenhouse gases emissions.

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The good news is that it is easy to reduce our carbon footprint due to transportation. If the distance is not too far, consider cycling or walking. Walking or biking not only helps reduce the CO₂ emission but also has significant health benefits. If it is too far for biking, consider public transportation or carpooling. Or take your bike to the bus stop, subway or train station, combining the best of both worlds!

These are some small efforts that each and every one of us can make to help protect our Mother Earth. Some people might think: "What impact does it have if I reduce my carbon footprint? My contribution is so insignificant!". But many drops of water, when taken together, can create a powerful, purifying river. If someone is willing to start taking action, he or she can influence the people around him or her to "get onboard" and as the trend spreads the impact will be tremendous. Saving the world is not impossible, but it takes the efforts of every single one of us!

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