

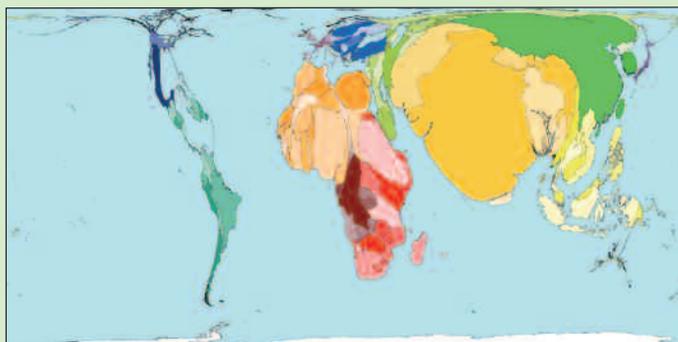
**QuickStudy****ENVIRONMENT****GIVE BACK Planet**  
to the**What is Sustainability?**

- Sustainability is the capacity to maintain a certain process or state. It is most frequently used in connection with biological and human systems.
  - In an ecological context, sustainability is the ability of an ecosystem to maintain ecological processes, functions, biodiversity and productivity into the future.
- Sustainability can be applied to almost every facet of life:
  - Different levels of biological organization, such as: wetlands, prairies and forests.
  - Human organization concepts, such as: eco-villages, eco-municipalities and sustainable cities.
  - Human activities and disciplines, such as: sustainable agriculture, sustainable architecture and renewable energy.
- For humans to live sustainably, the Earth's resources must be used at a rate in which they can be replenished.
- There is clear scientific evidence that humanity is living unsustainably, and that collective efforts are needed to return human use of natural resources to sustainable limits.
- Research on a global level into the issue has resulted in a number of key goals:
  - Providing future generations with the same environmental potential as presently exists.
  - Managing economic growth to be less resource-intensive and less polluting.
- Integrating environmental, social and economic sectors when developing sustainability policies.
- Maintaining and enhancing the adaptive capacity of the environmental system.
- Preventing irreversible long-term damage to ecosystems and human health.
- Avoiding unfair or high environmental costs on vulnerable populations.
- Assuming responsibility for environmental effects that occur outside areas of jurisdiction.
- Encouraging people and communities to investigate problems and develop new solutions.

**Poverty & Sustainability\***

- Efforts to practice better sustainability within the environment also include aiding those who live in extreme poverty.
- The World Bank defines extreme poverty as not having enough income to meet the most basic needs for adequate food, water, shelter, clothing, sanitation, health care and education.
  - In 2008, 1.4 billion people around the world were living on less than \$1.25 per day.
  - South Asia is the region with the largest number of people living in extreme poverty—a total of 600 million, including 455 million in India.
- Aid for people suffering from extreme poverty usually comes in the form of financial donations and supplies, often provided through charitable campaigns run by groups that include the World Health Organization (WHO), GiveWell, Population Services International (PSI) and Oxfam International.
  - In addition, high school and college students are encouraged to volunteer in programs like Student Partnership Worldwide, which specializes in training young people to work on projects that improve the lives of rural people.

\*Singer, Peter (2009). *The Life You Can Save*. Random House, New York, NY.



This density-equalising map re-sizes each territory to depict the scope of poverty in the world.  
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*Poverty is not just a financial state. Being poor affects life in many ways. The human poverty index uses indicators that capture non-financial elements of poverty, such as life expectancy, adult literacy, water quality, and children that are underweight.*

**Take the Pledge**

If we could easily save the life of a child, we would. For example, if we saw a child in danger of drowning in a shallow pond, and all we had to do to save the child was wade into the pond, and pull him out, we would do so. The fact that we would get wet, or ruin a good pair of shoes, doesn't really count when it comes to saving a child's life.

Will you do your part to save the lives of people living in extreme poverty? In *The Life You Can Save*, Peter Singer suggests a new public standard for a minimum that we should expect people to give. By pledging to donate the percentage of your income that meets the standard, you will be making a difference to the poor. But that's not all: you will also be helping to change the public standard of what is involved in living an ethical life in a world that contains both great affluence and extreme poverty. Visit [www.TheLifeYouCanSave.com](http://www.TheLifeYouCanSave.com)

The Life You Can Save – both the book and this website – seek to change this. If everyone who can afford to contribute to reducing extreme poverty were to give a modest proportion of their income to effective organizations fighting extreme poverty, the problem could be solved. It wouldn't take a huge sacrifice. But first we need to change the culture of giving.

**Reduce, Reuse, Recycle\***

- The 3Rs (Reduce, Reuse and Recycle) is no longer simply a mantra for environmental activists, it's a ticket to saving you money while you consider the planet. The 3Rs ask you to buy less, reuse more and recycle products at the end of their useful life – wonderful guiding principles for reducing our environmental footprint and bringing our lifestyles into balance with nature.

- Apply the concept of Reducing to decrease the amount of waste you generate. Start your new "waste-loss" regime with a water filtration system that lets you enjoy endless amounts of tasty tap water while eliminating unwanted substances – lead, chlorine, copper, and mercury to name a few – that could be in your water. And you'll save money as you wean yourself off your disposable water habit – a practice that collectively results in more than 38 billion disposable plastic bottles deposited in the landfill each year in the United States.



- Reuse may be in its finest form on The Freecycle Network ([freecycle.org](http://freecycle.org)). The concept is so simple you'll be surprised you didn't think of it first. Freecycle members join a local email group where they list used items they no longer need or are willing to give away for free. Members are participating in the global gifting economy, which collectively redirects thousands of tons of usable items away from the landfill and into the hands of those who will benefit from them.
- Recycle, the last of the 3R trio, is the most transformative of the Rs. When we recycle, we're giving used products the chance to be reborn as something new. Find centralized information on all things recycling by visiting Earth911 or calling its toll-free hotline at 1-800-CLEANUP. Find out how to recycle, why to recycle and where to recycle by typing in your zip code and a specific item like compact fluorescent lightbulbs, batteries, or plastic bottles.

\* Dorfman, Josh (2009). *The Lazy Environmentalist on a Budget: Save Money. Save Time. Save the Planet*. Stewart, Tabori & Chang, New York, NY.

**Used Textbooks & Buyback**

- According to the National Center for Education Statistics, the average yearly cost of textbooks for a college student has grown to nearly \$1,000; purchasing used textbooks can reduce this expense to less than \$500 per year.
- Since it takes one tree just to produce approximately 11 books, used textbooks are also an eco-friendly alternative to purchasing new textbooks and then discarding them at the end of the term.
- Those who want to sell their textbooks for cash can take advantage of buyback programs, which are usually held by the bookstore where the textbooks were originally purchased. Such programs take place over the course of a few weeks at the end of the semester, or throughout the school year.
  - The amount offered will vary depending on circumstances such as current supply, professor need, and what edition is being sold.
  - Most schools will give anywhere from 25%-50% of the price paid for the book.

\* From [http://www.ehow.com/about\\_4702625\\_used-textbooks.html](http://www.ehow.com/about_4702625_used-textbooks.html), <http://www.campusgroto.com/textbook-buyback.html>

# Groups & Organizations Associated with Sustainability

## Earth Island Institute

- Started in 1984, Earth Island Institute is a non-profit, public interest membership organization that supports people who are creating solutions to protect the planet.
- Earth Island serves as an incubator for start-up environmental projects, giving crucial assistance to groups and individuals with new ideas for promoting ecological sustainability. Since the institute was first founded, it has provided fiscal sponsorship to more than 100 projects around the globe.
- In addition to project support work, Earth Island:
  - Publishes the award-winning quarterly magazine *Earth Island Journal*.
  - Hosts the annual Brower Youth Awards, which highlights the accomplishments of young people working for sustainability and provides emerging leaders with mentoring resources.
  - Funds community-based coastal protection and wetland restoration efforts in Southern California.
- Earth Island Institute Web site: [www.earthisland.org](http://www.earthisland.org)



## Filter for Good

- Filter for Good is a program developed by water filtration company Brita and container manufacturer Nalgene in 2007 to address safe water and the waste created by disposable plastic bottles.
- The program asks those who participate to reduce their personal waste by giving up bottled water, even if it is just a few days each week; filtered water and reusable bottles are promoted as environmentally sound alternatives.
- Filter for Good Web site: [www.filterforgood.com](http://www.filterforgood.com)



## Kiva: Loans that Change Lives

- Kiva's mission is to connect people through lending for the sake of alleviating poverty.
- Kiva is the world's first person-to-person micro-lending Web site, empowering individuals to lend directly to unique entrepreneurs in the developing world.
- When you browse entrepreneurs' profiles on the site, choose someone to lend to, and then make a loan, you are helping a real person make great strides towards economic independence and improve life for themselves, their family, and their community.
- Throughout the course of the loan (usually 6-12 months), you can receive email journal updates and track repayments. Then, when you get your loan money back, you can relend to someone else in need.
- Kiva Web site: [www.kiva.org](http://www.kiva.org)



## Oxfam International

- Originally founded in 1942, Oxfam International is a confederation of 13 organizations working with over 3,000 partners in more than 100 countries to find lasting solutions to poverty and injustice.
- Oxfam's program has three main points of focus:
  - Development work, which tries to lift communities out of poverty with long-term, sustainable solutions based on their needs.
  - Humanitarian work, which assists those immediately affected by conflict and natural disasters (often leading to longer-term development work), especially in the field of water and sanitation.
  - Lobbyist, advocacy and popular campaigning that tries to affect policy decisions on the causes of conflict at local, national and international levels.
- Oxfam also works on trade justice, fair trade, education, debt and aid, livelihoods, health, HIV/AIDS, gender equality, democracy and human rights, and climate change.
- Oxfam International Web site: [www.oxfam.org](http://www.oxfam.org)



## Union of Concerned Scientists (UCS)

- First organized in 1969, UCS is a science-based nonprofit group of more than 250,000 citizens and scientists working for a healthy environment.
- UCS combines independent scientific research and citizen action to develop practical solutions and to secure responsible changes in government policy, corporate practices and consumer choices.
- UCS Web site: [www.ucsusa.org](http://www.ucsusa.org)



## Worldwatch Institute

- Based in Washington, D.C., the Worldwatch Institute is an independent research organization that specializes in accessible, fact-based analysis of critical global issues. The organization was created in 1974.
- Worldwatch's mission is to generate and promote insights and ideas that empower decision makers to build an ecologically sustainable society that meets human needs.
- The organization's research is disseminated in over 20 languages through print and online media. Its programs include those that center on building a low-carbon energy system, creating a healthy future for agriculture and developing a sustainable global economy.
- Worldwatch Institute Web site: [www.worldwatch.org](http://www.worldwatch.org)



## Water Footprint\*

- The EPA estimates that the average American household of four uses about 146,000 gallons of water annually, or the equivalent of 100 gallons per day per person.
- The U.S. water footprint is 2,500 cubic meter per year per capita. A water footprint is defined as the total volume of freshwater that is used to produce the goods and services consumed by the individual or community, or produced by the business.
- A recent government study cited by the EPA reveals that at least 36 states anticipate water shortages on a local, regional, or statewide level by 2013.
- The EPA estimates that simple conservation techniques can help the average household reduce its yearly water and sewer bills by \$170.
  - A shower once a day can add up to 7,300 gallons per year. Installing a low-flow showerhead or a water-saving showerhead can reduce water usage by as much as 40%.
  - Standard kitchen and bathroom faucets flow at two gallons per minute. Install a WaterSense-certified faucet or an inexpensive faucet aerator to reduce the amount of water flow to only 1.5 gallons per minute while still delivering a powerful spray. Faucet brands that are WaterSense-certified can be found at [www.epa.gov/watersense](http://www.epa.gov/watersense) and aerators are available at local hardware stores.

\* Dorfman, Josh (2009). *The Lazy Environmentalist on a Budget: Save Money. Save Time. Save the Planet.*



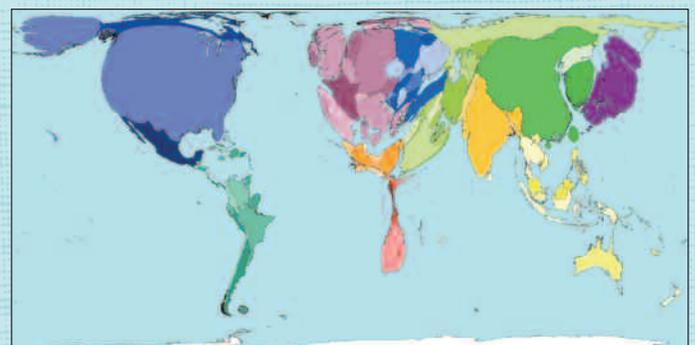
This density-equalising map resizes each territory to depict the water used by each territory. © Copyright 2006 SASI Group (University of Sheffield) and Mark Newman (University of Michigan).

Four thousand cubic kilometres of water are used by people each year around the world, for domestic, agricultural and other industrial purposes. This does not include nonconsumptive uses such as energy generation, mining, and recreation.

## Carbon Footprint\*

- A carbon footprint is defined as the total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO<sub>2</sub>) and calculated for the time period of a year. Examples include:
  - When one drives a car, the engine burns fuel, which creates a certain amount of CO<sub>2</sub>, depending on its fuel consumption and the driving distance.
  - When a house is heated with oil, gas or coal, CO<sub>2</sub> is also generated; even if the house is heated with electricity, the generation of the electrical power may also have emitted a certain amount of CO<sub>2</sub>.
  - Production of food and goods also emit some quantities of CO<sub>2</sub>.

\* From <http://www.timeforchange.org/http://www.nature.org/initiatives/climatechange/calculator/>



This density-equalising map resizes each territory to depict the carbon emissions generated by each territory. © Copyright 2006 SASI Group (University of Sheffield) and Mark Newman (University of Michigan).

Carbon dioxide causes roughly 60% of the 'enhanced greenhouse effect' or global warming resulting from certain gases emitted by human activities. In 2000 there were almost 23 billion tonnes of carbon dioxide emitted worldwide. Of this, 28% came from North American territories; 0.09% came from Central African territories. Emissions of carbon dioxide vary hugely between places, due to differences in lifestyle and ways of producing energy. Whilst people living in 66 territories emitted less than 1 tonne per person in 2000; more than 10 tonnes per person were emitted by people living in the highest polluting 21 territories that year.