

## Sustained Development

**Humble Student:** Professor, what is “sustainable development”? It seems like a contradiction in terms?

**Brilliant Professor:** Oh no, my dear student. Sustainable development is the current mantra for all environmental science and engineering education. We teach that concept to all of our students to let them know that one really can have a good environment and a good economy at the same time.

**Humble Student:** It sounds a bit like having your cake and eating it, too.

**Brilliant Professor:** Not at all. Sustainable development isn't really a policy—it's more like a promise that we will continuously improve our environmental performance. Why, I've written dozens of fascinating peer-reviewed papers on the subject. I'm sure you'd like to read (and cite) them.

**Humble Student:** But can we “continuously improve” fast enough? Isn't the real problem our worldwide growth in population and consumption? Until we come to grips with that and get consumption drastically reduced, it seems we don't have a chance for global improvement, especially in light of the need for developing countries to, well, develop.

**Brilliant Professor:** It may seem like that to you, my dear protégé, so young and naïve. But I've had the vantage point of many scholarly sabbaticals, summer vacations, winter interim periods, and spring breaks to be able to contemplate the big picture. Although the environment has definitely taken a hit, we are making progress through the U.S. Clean Air and Water Acts; through best engineering practices; and through international treaties like the Rio Declaration and the Kyoto Convention.

**Humble Student:** But the world will soon be meeting in Copenhagen for the 15th Conference of Parties of the United Nations Framework Convention on Climate Change to replace the Kyoto Protocol, and the U.S. cannot even see its way clear to pass a watered-down bill like Waxman–Markey to reduce its greenhouse gases and put a price on carbon emissions. Do you really think a capitalist system can meet the challenge?

**Brilliant Professor:** Not to worry. A rainbow emerges only after the storm. Through leadership from the U.S., we will come to an international agreement. And we'll have a better economy for it with plug-in hybrid cars, wind and solar power, and energy efficiency. Of course, China, India, Mexico, and Brazil will need to limit their emissions, too—the U.S., Europe, and Japan can't do it all.

**Humble Student:** I took a class in humanities and global studies, and the professor said that the only

thing the U.S. has done is to profit from its profligate use of energy and from putting its waste into the atmosphere. The professor also said that the U.S. publishes the most about environmental science and technology, but it's the biggest polluter of all. And he said that U.S. corporations control government in Washington, DC and will never allow a carbon tax or a serious cap-and-trade program.

**Brilliant Professor:** Ha! That doesn't surprise me coming from the humanities. Why do you take classes there anyway? My course in environmental modeling was open last semester...

**Humble Student (humbly interrupting):** Sometimes it seems like environmental science is mostly about documenting the losses and environmental technology is about designing small improvements at the margins. My postmodernist friends say that environmental engineering is a major part of the problem. While seeming to be addressing the problems, we create new ones and miss the warning signs, like in Jared Diamond's book, *Collapse*.

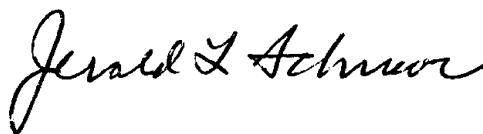
**Brilliant Professor:** You should choose better friends. Actually the air is cleaner and the water is purer than at any time in the past 40 years—that was back when I attended the first Earth Day protests (and my clothes smelled like oregano). You can be proud that our profession is in charge of protecting the air, water, and soil for the entire world. We'll get a handle on this problem just like we did for the ozone hole with the Montreal Protocol.

**Humble Student:** I guess you really have been around a long time and can see the big picture. I'm lucky to be able to learn from that perspective. Do you think our democratic system can really find a way to make the hard choices and protect the environment? We just seem to stumble along, narrowly averting one disaster after another. Sometimes it seems like the only thing that society has accomplished is “sustained development”, but I guess there really has been environmental improvement.

**Brilliant Professor:** Someday you will see clearly how our teaching and research is promoting sustainable development on this finite planet.

**Humble Student:** You are so wise, Professor. I'm really fortunate to be able to learn from you.

**Brilliant Professor:** I know.



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