



SUSTAINABLE SOCIETY ACTION PROJECT, Inc.

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SSAP meeting Monday, July 13, 2009 7:30 PM at our house - RSVP

Since the important decisions on the future of SSAP have not been made yet, we must discuss them again. The sustainability situation has changed dramatically since SSAP organized the first conference in 1990. Back then, the critical action was to get people to understand the concept of "sustainability". Today, it seems the next step is get a larger movement organized locally; somewhere between political organizing to get top-down government action and community organization to get individuals living "green", with low carbon footprints.

How can SSAP best contribute to the movement? Without an influx of new talent, we can no longer organize conferences, as in the past, even if this is the best role for SSAP. SSAP can continue as a local sustainability discussion group, with 3-4 meetings a year, and a NewsLetter. We could support the work of other organizations, including schools; or, what? Your input is really needed. Just to get a few more people to come, there will be a free book as a door prize.

As usual, we will also have good refreshments and conversation after the formal business meeting. Making a sustainable world should be enjoyable, not a drag, for all who are involved.

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Transportation Energy Taxes

For quite a few years, long range planners have been warning that there is an impending fossil fuel crisis: America imports well over half the petroleum we use, the fraction is growing, and we have started importing natural gas. Pennsylvania, like many other states, restricts the use of gasoline taxes to highway construction and maintenance. This restriction was a key agenda of the automobile clubs decades ago.

Today, the American transportation infrastructure for all modes is badly maintained, due to lack of funds. This includes pipelines, transit, power lines, waterways, and rail. Obviously, more money is required. Congress should take the politically risky action: increase taxes on transportation energy. To avoid an obvious tax increase, some people have been advocating a mileage tax instead. It should be levied on all transportation modes, not just highways. The higher cost of transportation energy will tend to shift both passengers and freight to higher efficiency modes, such as rail, and away from highways and airways. It will also tend to make users more conscious of efficient vehicle operation, and encourage the use of hybrid and battery-electric vehicles, and electric transit.

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"Life in the Long Run" (Science, 12 June 2009, pp 1366-1367)

"The idea that we are already committed to a certain amount of surface air temperature increase and sea-level rise over the coming century, even if we could immediately halt all CO2 emissions, has become well known in scientific and science policy circles. The longer-term outlook is less well understood. Eby et al use a complex, coupled climate-carbon cycle model to investigate how long anthropogenic climate change will persist as a function of how high the concentration of atmospheric CO2 rises. They calculate how long it will take for half of the total emissions to be removed from the atmosphere, what the maximum global sea surface temperature increase will be, and how long it will take for 80% of that sea surface thermal anomaly to decay. The results suggest that atmospheric CO2 can persist at high concentrations for several thousand years, and that sea surface temperature increases can last many times longer than that. It looks, then, that we are in this for the long haul.

(J. Climate 22, 2501 (2009))"

## Sociology and Sustainability

Sociology is the study of how humans interact in society. The sustainability problem comes from what humans and human society does. There seems to be three areas in which social scientists can help work on the sustainability problem. While we don't usually think about it, technology is developed and implemented by humans. Laws are made by humans, and either obeyed or flouted by humans. We need the help of social scientists to make a sustainable future.

1. Bottom up: how do we change culture so that Americans and others live sustainably.
2. Top down: what laws, and law enforcement, will actually work, and not be evaded.
3. How to end political and religious violence that precludes dealing with the problem.

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### The Dominant Animal (Human Evolution and the Environment) by Paul R. Ehrlich and Anne H. Ehrlich May 7, 2009

If you only have time to read one book on sustainability, this is it. It covers the entire waterfront. Of course, the dominant animal is human kind, the end product of evolution. Conditions on Earth have influenced both how our genes and our culture have evolved. In turn, our evolving nature, both our bodies and our culture, as well as the number of humans on the Planet, have affected life, and even the geophysics, of Planet Earth.

The familiar bad news is that the impact of human civilization on this Planet threatens our species. The unfamiliar good news, which was the subject of the first SSAP conference in 1990: a significant number of people in the advanced nations are now aware of that possibility, and might possibly take action to avert the tragedy.

Most Americans are aware of the concept of climate change, even if they reject the scientific evidence. However, climate change is not just warming; it involves changes in precipitation and storms as well. The recent high price of gasoline has made many Americans aware of possible exhaustion of non-renewable resources, but few are aware of the whole, complicated fossil fuel picture. In a futile attempt to stretch the supply of fossil fuel with biofuels, we may find ourselves short of food. Would you rather drive a car or eat?

On page 280, the authors mention the unmentionable: population numbers. Given enough food and other basic resources, all natural populations grow in numbers. Eventually, the number of humans on Earth will have to be limited. Can this be done gracefully, or will it be handled by the four horsemen of the apocalypse? Those who understand the sustainability problem, must take action before social and economic breakdown drives human civilization past the point of no return. There is no time to lose!

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### Ernest's Page

I have recently been invited to write a column for the Almanack, the on-line publication of the IEEE in the Greater Delaware Valley, entitled "Ernest's Page". This column will deal with sustainability and other social/technical issues. Ernest's Page can be accessed at <http://www.ieeephiladelphia.org>

The Cohens have recently become involved with the Upper Darby Farmers Market Coalition (UDFMC). This group is trying to create a farmers market to serve Upper Darby and Milbourne. Want to know more? Contact Khiet Luong at [kluong@pecpa.org](mailto:kluong@pecpa.org).