

Rutland Herald

Article from www.rutlandherald.com Print.

<http://www.rutlandherald.com/article/20080120/ENVIRONMENT/701636183>

[Back](#)

Article published Jan 20, 2008

Weekly Planet: Welcome to the planet

Dr. Alan Betts

This is an exciting moment for Vermont: the beginning of the "Weekly Planet" column and the new environmental section of this newspaper. The journey before us will be a great adventure. We have reached a critical time for the earth. This past year, four reports from the Intergovernmental Panel on Climate Change mapped out in remarkable detail the scientific evidence that our fossil fuel economy is driving irrevocable climate change by increasing the heat-trapping greenhouse gases in the atmosphere. These reports also outlined what our society can do both to change direction and adapt to the warming of the planet that is already under way.

We started 2007 in Vermont with record temperatures in January; by September, 40 percent of the Arctic icecap had melted. For the first time the fabled Northwest Passage was ice-free. The frozen north is melting rapidly as the Earth warms, and droughts are spreading in the subtropics.

The discovery of fossil fuels centuries ago drove the industrial development of our world. Until the last few decades, we had no idea of the consequences for the earth's climate. Oil supplies may now be running scarce, because we burn it so wastefully; but centuries of coal reserves remain. If we simply burn all this coal as we have consumed oil, the earth will warm so much that the ice on Greenland and western Antarctica will eventually melt. Sea-level will rise by as much as 50 feet to flood our coastal cities and plains. Whole ecosystems will be destroyed as the earth continues to warm, and hundreds of millions of people will be become refugees, driven from their homes by environmental disasters, floods, drought and starvation.

It is difficult for us to grasp the scale and magnitude of the issue that we face. For many years a wealth of opposing interests have been spreading misinformation about the global climate change that is under way, in an effort to deny that our wasteful use of fossil energy is responsible. Time is running out. We must change direction and reshape our infrastructure to be energy efficient and powered by renewable energy sources. We now have less than a generation to do this, because we have delayed so long. We need ideas, inspiration, and ways of working creatively and more humbly with the earth, not against it, as we make the transition away from fossil fuels. We need clarity and hope to find our way though the web of confusion and doubt that those who stand to profit in the short run will continue to weave.

How can we recognize the landmarks on our way to a sustainable society? Think of some simple examples! Does it make sense to drive a heavy, inefficient truck or SUV to work, when an elegant and powerful hybrid gas-electric car will do the same job and get 50 miles to the gallon? As our heating oil bills skyrocket, isn't it time to fix those drafts and double the insulation in our homes? Either measure alone each year could save about \$1,000 fuel costs and put 7,000 fewer pounds of CO2 into the air.

Using fossil fuels to ship most of our food thousands of miles is not sustainable. Growing more of our food locally is not only sustainable but also benefits Vermont farms. It's even easier for us now, as the warming of the earth has extended our growing season by one month in the past 30 years. For the last few years, I have been able to grow magnificent sweet potatoes in Pittsford!

We need to develop new, renewable energy sources and new business models that are sustainable and earth-friendly. Anything that makes our communities more self-reliant is a step in the right direction. As our society functions more efficiently and we use less fossil fuel, we save money and reduce the growth of the CO2 burden in the earth's atmosphere.

This is a huge but exciting transformation of our society, and it will require sustained community effort. The rewards for us, our children and grandchildren and our planet are immense. The price of continuing to ignore what our inefficient fossil-fuel society is doing to the web of life on this earth is beyond words.

Dr. Alan Betts, a Pittsford resident, is Vermont's leading climate scientist and the past-president of the Vermont Academy of Science and Engineering. He has been conducting atmospheric research in Vermont since 1979.

He can be reached at akbetts@aol.com