New Year's reflections on our responsibility for the Earth Alan Betts (http://alanbetts.com)

At the beginning of a new year as we enter the depths of winter, it is useful to review what is happening to our planet and what we learned in the past year. Climate change is forcing us to face something that nobody wants to face: Humanity is now responsible for the future of Earth. Developments in science and technology and the market economy have created our industrialized world, which is rapidly using up raw materials and fossil energy supplies while polluting the atmosphere and oceans.

You might think that scientists would feel deeply responsible for this, but most are isolated in their own research worlds. The book "Frontiers of Illusion" by Dan Sarewitz, written more than a decade ago, outlines the traditional myth that society benefits most when scientists are left alone to do their research.

Our climate problem is one unfortunate consequence of this hands-off attitude toward science and technology, exacerbated by our "free market" philosophy. Yet climate scientists still see their task as simply trying to understand and model all the complexities of the Earth system as accurately as possible, so we will be better able to estimate the climate risks we face. The scientists naively assume that our politicians will use this valuable information to redirect the economy away from fossil fuels and thus steer us away from the looming precipice of irreversible climate change.

But we live in a democracy, and this reality is the last thing that we and our elected leaders want to face. Politicians will say and do almost anything to avoid responsibility for difficult and painful decisions. Their main goal is to stick to policies that will get them re-elected — however absurd and shortsighted these may seem to our children, who must face the consequences. Politicians respond to the climate change problem by simply offering scientists more borrowed money to keep quiet and do more research. And there is always plenty to do.

Although climate research is sold to the public as necessary to provide governments with better guidance for the future, it is less and less useful for this — at least in the United States. The Earth system has such an unpredictable richness and complexity that our computer models cannot predict the future in enough regional detail to give cover for difficult political choices.

So at the national level our paralysis has deepened, and progress toward global governance on climate issues is even slower than the slow advance of global change. Where does this leave informed citizens, who realize that humanity must respect Earth system limits or face the consequences? Yes, it is up to us to cheerfully do what needs to be done to build a new resilient path for our communities.

Here in Vermont we can do this with the support of our businesses and Legislature. In fact, this has been a year of visible progress — in retrofitting homes to reduce fuel use and starting the long transformation of our energy economy. The first megawatt-scale solar farm came on line in Vergennes last month, thanks to the vision of developer Ernie Pomerleau, who led the Governor's Climate Change Commission a few years ago.

Small but efficient biomass power plants are moving forward, and a few new wind farms may get built. The local food and farm markets are steadily expanding. Fuel-efficient cars are becoming more readily available, but we still need a rural transportation system to reduce our dependence on single-occupancy vehicles.

So gather again before the winter fires and dream of what we can build together this coming year that will help secure the future for our children and for life on Earth.