

Rising to the Challenge

We are facing a world crisis which is of a magnitude beyond anything we have faced before. Jerry Adler, of Newsweek magazine, recently called it "...a slow-motion crisis, requiring heroic action now to head off disaster decades down the road." Meeting the huge challenge of rapid transition to a new energy economy will be the life-work of this generation.

Scientists say that we have a narrowing window in which we can make effective changes. Think of it as nudging an asteroid's trajectory while it's still far enough out to make a difference. Specifically, we must reduce carbon emissions by at least 80% by 2050; a target which California has made into law, and is on track to accomplish. We have ten years to implement significant change in our energy economy in order to achieve the goal by 2050. The world is already feeling the results of climate change. A decade's delay may make it impossible to avert the most damaging effects.

The Climate Mitigation Initiative at Princeton has suggested fifteen strategies, any seven of which, taken together, can bring CO₂ emissions into the target range by 2050 if pursued aggressively. All of them can be significantly helped by federal legislation; perhaps a couple should be reconsidered (do we really want more nuclear plants, or to replace food and forests with fuel crops?).

Take a look:

Two billion cars at 60 mpg by 2054; decreased travel for two billion 30 mpg cars by 2054; energy efficient buildings and appliances emitting 25% less carbon; stop deforestation, and increased re-forestation; increase wind power by 50 times the current capacity; increase solar power by 700 times the current capacity; implement soil conservation; increase the efficiency of coal power generation to 60%; replace less efficient coal plants with natural gas plants; capture CO₂ at existing coal plants; wind-generated hydrogen in fuel-cells to replace gasoline in hybrid cars; biomass fuels (this would require a sixth of the world's crop land); capture CO₂ at hydrogen plants; capture CO₂ at synfuel plants; double the current capacity of nuclear plants.

Does it seem impossible? I think there's hope. But for it to happen within this short time-span, it will require strong federal action. Imagine what would have happened if the federal government sat back and left mobilization for World War II to the market economy and volunteers. Rather, President Hoover set huge goals, and said, "Let no man say it cannot be done."

The economy was transformed into a war machine in less than three years, largely at the direction of the federal government. Ohio became a major manufacturing site for the war effort, churning out thousands of planes, munitions, vehicles, and other war-related products. Supplies and food were rationed, but over a million "victory gardens" sprouted in Ohio to support the cause, and farmers increased their production by a third. "Victory bonds" were purchased to fund the military needs, and civilians recycled scrap metal, and donated blood. The state, and nation, was involved in many efforts, but with one cause.

Could we be that united again, for a cause that is no less a world struggle? We would be mobilizing for a “necessary war” of another sort. What if our steel factories turned out wind turbines rather than fighter planes? How about highly efficient locomotives for carbon-neutral rail transport here in the States, modeled after Eurostar? What if some of these factories produced solar panels, or tubes and pipes for thermal solar? Already we have industry leaders working on cleaning coal plant emissions, and developing hydrogen fuel cells. Companies around the world are seizing the opportunities presented by renewable energy. Why not here? This is not an economy that will be dependent on diminishing or unstable resources, or that will fade with the end of a war – it will be the new way of life, globally, for the foreseeable future. How quickly can we put this technology into action on a large scale?

At the city level, it is exciting to see that Alliance is considering the Mayors’ Climate Challenge, which is essentially a commitment to working to achieve these goals. If Alliance rises to the challenge, we will be joining a group of more than 435 progressive U.S. cities that are determined to effect change, and will save funds in the process. As Seattle’s mayor points out, “These cities represent 61 million people...that’s equivalent to the population of France, and larger than the United Kingdom.” Together we will make a difference.

As individuals, are we ready to make changes for the greater cause? Reducing our home or business emissions by 25% is very doable, by exchanging all of our incandescent bulbs for fluorescent bulbs, adjusting the thermostat a few degrees, and investing in Energy Star appliances as able. We can accomplish our part of other strategies by investing in a hybrid car, walking, biking or riding the bus, or making donations for the development of renewable energy through purchasing green energy certificates.

Our economy needs to be transformed within ten years; our world’s carbon emission must be stabilized within the next forty years. I think Thomas Friedman had it right when he compared the challenge this generation faces with that of “the greatest generation” of WWII. Only even more is at stake.

Will we rise to the challenge?

Check it out:

Princeton Climate Mitigation Initiative: <http://www.princeton.edu/~cmi/resources/stabwedge.htm>

“Special Report: Leadership and the Environment,” Newsweek, April 16, 2007

Mayors’ Climate Challenge: <http://www.coolcities.us/>
<http://www.seattle.gov/mayor/climate/>

“Plan B 2.0” by Lester Brown, Earth Policy Institute

“The Power of Green,” NYT Magazine, Thomas Friedman