

Thankful for Hope this holiday season

What a difference a year can make. At this time last year, I was despairing for our world's future, feeling like I was watching people dance as the Titanic went down. This year, I'm feeling thankful, and hopeful, as the alerted world begins to slowly turn this massive ship away from disaster. Maybe we'll be able to alter our course just enough... The coming decades will not be easy, but now that the world is aware and is accepting that there is a risk over which we have at least some control, we have reason to hope. It surely beats hitting the disaster while in denial, mid-dance.

Less dramatically, we can think of our response to climate change as a risk management issue. Any architect or engineer is familiar with the situation. When designing a building or city infrastructure, one must take into account the worst case scenario. On the west coast, that's a possibility of 9.0 earthquake. On the Gulf of Mexico, it's the possibility of a category 5 hurricane making a direct strike. Here in Ohio, engineers consider the possibility of a 100-year flood. Are the designers being doomsayers to consider these possibilities, or are they being proactive? They are managing risk – minimizing the loss of life and property in the case of a future disaster. We are accustomed to designing-in a margin of safety, and accepting the extra cost. When we don't, the results are often much more costly, and usually make tragic headlines. New Orleans after Katrina, for example.

2007 will be remembered as an historic turning point in global risk management. The United Nation's Intergovernmental Panel on Climate Change (IPCC) summary released last Saturday may be considered the pivot point. This document for policy-makers, together with the November 17th presentation by the head of the Nobel-winning IPCC, Dr. Pachauri, provides an international consensus of the current knowledge of climate change to date. It differentiates between that which is virtually certain, such as the fact that the earth is warming and humankind is a major contributor to that climate change, and that which scientists are still struggling to understand, such as how quickly the sea level will rise. The report warns that there may be "tipping points" that aren't fully understood yet, and abrupt or even irreversible changes may occur as the earth warms. The more rapidly we reduce our carbon emissions, the less we risk these unpredictable results. The summary concludes in this way: "Responding to climate change involves an iterative risk management process that includes both adaptation and mitigation and takes into account climate change damages, co-benefits, sustainability, equity, and attitudes to risk." So how much risk are we willing to accept?

Even since the report was released last weekend, I've noticed a hopeful change in headlines. There seems to be a new readiness to commit to change, and a dawning understanding that it makes better economic sense to be proactive and minimize the risk, than to merely react and pay for the consequences of inaction. Thankfully, some key countries (including our own, China, and India) now seem ready to step up their part of the risk management with stronger policies. Next month's international meetings at Bali will tell.

But meanwhile, what can we do here? The Princeton Environmental Institute has identified a portfolio of fifteen different mitigation methods, or "stabilization wedges," each of which would

reduce CO2 emissions by 1 billion tons by 2055. Only seven of these measures would be required to stabilize the world's emissions by that time. Some of them are fully achievable by individuals, such as reducing your home or business's energy use by 25% (think fluorescent light bulbs, LED Christmas lights, and Energy Star appliances). If fuel efficiency standards for vehicles around the world were raised to 60 mpg (Europe already has a 50 mpg standard), another seventh could be eliminated. If those of us with 30 mpg vehicles could walk, bike, take the bus or carpool half the time, another seventh would be eliminated. Some changes will require larger entities to take action: ramping up the use of wind and solar power exponentially can eliminate another two wedges; sequestering CO2 from coal-burning facilities has potential; bio-fuels from cellulose, or non-food crops, can be another part of the solution. What the Princeton model does well is to illustrate that the successful solution will have many parts, all of which are possible with current technology, *if we have the will to manage the risk and make the changes.*

Thankfully, the world now seems to be taking the risks seriously. There is hope that we can reduce those risks. As we move into the holidays, and the new year, we can each look for ways to take part in the solution. How many "stabilization wedges" can your household achieve this winter? Hope is perhaps the best gift we can give each other.

Check it out:

Intergovernmental Panel on Climate Change website, with summary report and presentations:
<http://www.ipcc.ch/>

Princeton Environmental Institute "Stabilization Wedges" website, including educational resources: <http://www.princeton.edu/~cmi/resources/stabwedge.htm>

Consider saving money and emissions by investing in LED lights: "a household burning 10 strands of lights for eight hours a day for a month at \$0.0853 per kilowatt-hour would spend \$127.67 for large, incandescent bulbs, \$7.20 for traditional mini-lights, and just \$0.72 for LEDs. These newer bulbs are sturdy, last up to 100,000 hours, or 20 years, and barely warm up, eliminating fire concerns."

From Alliance to Save Energy - 19 Holiday Energy Efficiency tips:
<http://www.ase.org/content/news/detail/2737>

Decorate with Energy-saving LED Christmas Lights – saving energy during the holidays:
<http://www.environmentaldefense.org/article.cfm?contentID=5619>