

BOB DOPPELT: We don't have 10 years to cut carbon emissions

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Although support for a regional version failed this year here on the left coast, momentum is growing on Capitol Hill for passage of national cap and trade legislation. Meaningful cuts in climate-damaging carbon emissions, however, would not occur for at least a decade under the Markey-Waxman bill. President Obama's new clean car standards also will not reduce emissions for many years.

This is too late to prevent runaway climate change. An expanded approach is needed.

The International Scientific Congress on Climate Change held in March concluded that "The worse-case scenarios of the 2007 Intergovernmental Panel on Climate Change report (or even worse) are now being realized... There is an increasing risk of abrupt and irreversible climatic shifts."

This means that if we are to prevent uncontrollable climate change we must begin to cut carbon emission now, not in 10 years.

There is a way to rapidly lower emissions: a national campaign to eliminate wasted energy.

Research shows it is possible to quickly slash energy use and carbon emissions by 10 to 20 percent or more while improving productivity and well-being through simple low- and no-cost behavioral changes linked with the expanded use of existing technologies.

After just 10 weeks of education, for example, participants in the household Climate Master Program developed by my program at the University of Oregon cut their home electrical use by an average of 12 to 14 percent.

All told, through behavioral changes such as lowering water-heater thermostats and reducing single-passenger vehicle travel, participants reduced their annual carbon emissions by 2 tons per person. Most saved money as well.

The key, according to the participants, was the climate screen they added to their thinking that helped them continually identify ways to eliminate energy waste. Some said the experience changed their lives.

Similar savings are possible in industry.

According to the American Council for an Energy Efficient Economy, despite significant improvements over the years, low-cost efficiency opportunities exist in all industries.

For example, at least 18 percent of industrial electric use could be cost-effectively saved, often with a 25 percent return on investment.

Just as with households, the key for manufacturers and other businesses is to begin thinking in ways that make energy waste visible.

A great example is the reductions made by city of Eugene staff, as reported recently in The Register-Guard.

Maintenance staff responded to a challenge to cut fuel use by 5 percent by taking steps such as using smaller vehicles rather than large trucks, sharing rides, and riding bikes when possible.

Through these and other behavioral changes they rapidly exceeded their reduction goal.

At the regional scale, a new report titled "The Power of Efficiency" by the Northwest Energy Coalition concluded that enough cost-effective energy efficiency exists to meet the Pacific Northwest's growing electrical needs through 2020.

These findings are consistent with a review by a UO graduate student and me of behavioral change-focused energy and water use reduction initiatives conducted over the past 20 years. We found that, on average, the programs achieved 10 to 30 percent reductions in consumption.

A national energy waste elimination campaign could be modeled after the government's World War II initiative that made it unpatriotic for Americans to waste energy and resources needed for the war effort.

Although the program involved rationing, its success depended on voluntary action.

Government made this possible by establishing conservation and waste elimination as a social expectation.

Government-sponsored radio shows, ads and pamphlets, for example, urged people to conserve fuel and other raw materials. Posters were distributed urging people to be patriotic by signing pledges to save food. Women were trained in how to cook nutritious meals and eliminate food waste.

Importantly, in addition to saving valuable resources, public health improved and Americans developed an enhanced sense of community.

A similar effort is needed now involving all levels of government, every business and every household in Lane County, the state and nation.

This time the focus must be on defending our families and communities from the ravages of uncontrolled climate change.

A major campaign aimed at making it socially unacceptable to waste energy cannot alone resolve the climate crisis. Declining caps on emissions and many other policies will still be needed. One key will be to prevent efficiency improvements from triggering a rebound effect leading to higher energy use.

Energy waste elimination can, however, be an essential tool in avoiding runaway climate change while buying time for other policies to kick in.

Just as importantly in these tough economic times, it will help save money, improve public health and create a sense of purpose that enhances solidarity and well-being.

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