



Op Ed

Reducing carbon dioxide emissions is side benefit of a real energy policy

By Dave Edson and Steve Kahl

Recent reports that carbon dioxide emissions in the U.S. have fallen by 10 percent — to about 1992 levels — is good news. But the really great news is that this decline is caused by a more energy-efficient economy and increasing use of alternative fuels, including the astonishing drop in the percentage of our electricity generated by coal, from 50 percent to 34 percent in just five years. Replacing coal with natural gas has decreased carbon emissions, reduced acid rain, improved air quality and human health, and decreased the cost of electricity.

As the Associated Press reported, the rapid decrease in carbon dioxide was unexpected, pointing out a shortcoming of regulating carbon dioxide. Attempts at direct regulation of carbon dioxide are ineffective because the average citizen can't relate to reducing the emissions in their day-to-day lives. Instead, a proactive energy policy can phase in sustainable energy sources, which will reduce carbon dioxide without actually focusing directly on it.

The U.S. has needed to develop an energy plan since the first oil embargo in 1973, yet it hasn't done so. How can the country improve the energy economy, while reducing carbon-dioxide emissions? The answers are already available. With some tweaks to public policy to create incentives, we can change the prevalent cultural norms.

Within 10 years, everyone should expect to heat their home for no more than a few hundred dollars a year using electric heat pump technology already available. Within 10 years, most families should own at least one electric car that operates at a fraction of the cost per kilowatt compared to the price of gasoline. Why do people pre-buy their heating oil to save money, but virtually no one considers pre-buying electricity using solar power that will result in *free* electricity in 5 to 8 years? We need a new cultural norm.

Here are some specific steps for Maine:

1. Reduce upfront costs for energy projects. Property Assessed Clean Energy (PACE) loans allow property owners to fold the cost of energy improvements into their property taxes. Alternatively, the costs can be incorporated into a mortgage. Either way, these financing methods pay for themselves by reducing energy costs immediately. If a PACE home is sold, the new owner takes over the payments, while saving energy costs immediately. One hundred and fifty Maine municipalities have passed ordinances authorizing PACE loans. If yours hasn't, ask it to.

2. Encourage Power Purchase Agreements in which an energy company pays the upfront costs of an alternative energy system and then sells the power back at a reduced rate. This financing mechanism works best for public buildings, such as schools and municipal buildings. Imagine reducing the energy bills for your town schools by 10, 25 or even 50 percent with no upfront costs.

3. Raise the cap on privately-generated electricity from solar or wind and require utilities to carry net-metered credits forward indefinitely. Better yet, if utilities pay homeowners for producing more power than they consume, micro-generation will flourish and everyone will want solar panels. These minor tweaks to current policy would remove significant disincentives for generating renewable power in Maine and increase the resilience of the electric grid.

4. Develop incentives for conversion from oil heat. Maine's reliance on heating oil is a major economic drag and potentially economically catastrophic in the event of an oil shock. Ground-source and air-source heat pumps can heat homes cost-effectively with locally produced electricity. Air-source heat pumps in particular are especially cost-effective and cost much less than geothermal. Maine is already a net electricity exporter and can produce more from sources including solar, biomass, tidal and offshore wind. Bangor Hydro Electric and Central Maine Power already have incentives for efficient electric heating devices that can reduce heating oil use by 60 percent to 90 percent. Look to Efficiency Maine for other incentives for your home or business.

With some forethought plus existing technology, we can keep our energy dollars here in Maine and make our state the most economically competitive state in the region.

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