CUT HEATING COSTS, LIVE CLOSER TOGETHER: OP-ED

For retailers and compulsive shoppers, the week between Christmas and New Year's Day is a frenetic season of gift returns, steep discounts and marketing schemes. For me it's a limbo of lethargy and an interval of introspection. And, being a mammal that doesn't hibernate, I think quite a bit about surviving the bone-chilling seasonal combination of darkness and cold.

Lately, I've been thinking about the poor and the almost poor, groups which now constitute nearly half of the U.S. population. My main concern involves steep cuts in the federal government's Low Income Home Energy Assistance Program, which helps needy families get through a cold patch in their household budgets. The recession drags on, fuel prices remain high, the government is tied in knots and the presidential primaries are getting most of the attention.

So, what's to be done to keep needy Connecticut residents warm?

Certainly the answer cannot be, "Let them freeze in the dark," or die of carbon monoxide poisoning while trying to stay warm using unconventional and unsafe techniques. This is why a tri-partisan coalition of New England senators is asking the federal government to restore the cuts by finding money somewhere else. Though this makes perfect political sense, it doesn't solve the real problem.

On another front, progressive environmentalists are pushing for the development of alternative heating sources (anything but nuclear) and the construction of smaller, tighter homes. But this does little to help those already ensconced in poorly insulated family homes dating to the era of cheap fuels, which is where much of shortfall in heat occurs.

Others imagine a supply-side economic solution, arguing that low-income homeowners could afford the oil or gas they needed if the price were lower. In this camp are those who support "fracking" of underground reservoirs, whether for gas in the Marcellus Shale in adjacent New York, or for oil in the Bakken formation in North Dakota. In this technique, subsurface reservoirs that were previously too tight for production are shattered with explosives and the fractures pried open by pressurized water. Also in this camp are those supporting the development of the Keystone pipeline, which, if approved, would transport oil to Texas that was steam-rendered from tarry residues in strip-mined Canadian sandstone.

Though technologically feasible, such production is not likely to help the poor heat their homes in the long run, based on: "Energy return on investment, peak oil and the end of economic growth," an article published in a special issue of the Annals of the New York Academy of Sciences titled "Ecological Economics Reviews." It describes an "economic growth paradox" in which "increasing the oil supply [from unconventional sources] to support economic growth will require high oil prices that will undermine that economic growth," thereby keeping the jobless unemployed.

I suggest the time-honored solution of conservation by huddling closer together, a technique used by virtually all warm blooded creatures, including humans prior to the era of fossil fuels.

High school physics taught me that the efficiency of space heating involves: the temperature to which air is heated; the volume of that air relative to the area of exterior walls; and the insulation in those walls minus air leakage. The best case is an igloo large enough for an extended family. Close to the worst case is the mid-20th century stick-built ranch house constructed in the era of cheap fossil fuels and now occupied by one or two elderly residents who need extra warmth.
In the not-so-distant future, the only energy-affordable private domicile for people having trouble paying their heating bills may be within a large apartment building with central climate control and sharing exterior walls. This conservation strategy works, as proven by the lower per capita heating costs of cities relative to isolated homes.

Those who can afford to live the American "dream" of a stand-alone home losing heat on six sides will likely opt to do so. But those who cannot may want to reconsider congregate housing.

We are, after all, social mammals.