Energy Production versus Conservation
By Dwight Lee
Audio, 8:45 minutes

Question for thought: Can governments determine how much energy production and conservation is appropriate and efficient? Explain.

One of the most important insights in economics was made by F.A. Hayek in a famous article titled "The Use of Knowledge in Society" (*American Economic Review,* September 1945). Hayek's insight was simple, but powerful: the information necessary for making sensible economic choices is far too dispersed and difficult to articulate ever to be possessed by any one person or group of experts. Hayek emphasized in his article that only through market prices can people become sufficiently informed to direct resources into their most valuable uses. Eliminate market prices, or distort them with politically imposed ceilings or floors, and you systematically destroy the information that people need to avoid wasting resources.

Unfortunately, most people seem immune to Hayek's point. This immunity is particularly strong among politicians and journalists. The prevailing view seems to be that when an economic problem arises, the solution lies in ignorance.

The most recent example of this view concerns the production-versus-conservation debate over energy policy. It is widely accepted that the decision on the right mix of production and conservation is best made by Congress after it has imposed "market-based" price caps on important energy prices. Consider an editorial comment in the May 28, 2001, *Business Week:* "No one, except for a handful of eco-extremists, believes that conservation is the only answer to the energy crisis. But few believe that conservation plays no role either. It is up to Congress to negotiate a balance in the weeks ahead." (Emphasis added. I should point out that price controls were not recommended in this editorial.)

If politicians could only resist the urge to control energy prices, there would be no need for them to worry about "negotiating a balance" between energy production and conservation. But having yielded to the urge to control those prices, neither politicians nor anyone else can have the foggiest idea how much production and conservation is appropriate.

Every time we get worried about the availability of energy, a debate breaks out over conservation versus production. It happened in the 1970s and early ’80s in response to the export restrictions of OPEC and then again earlier this year in response to less drastic OPEC cutbacks coupled with the politically induced electricity shortages in California. One side argues that we should drive smaller cars, make more use of mass transit, buy more energy-efficient appliances, do a better job insulating our homes and offices, and keep them warmer in the summer and cooler in the winter; the list of possibilities goes on. The other side argues that we can’t conserve ourselves to prosperity, so we should produce more energy by drilling for more oil, mining more coal, building more electric generating plants, and bringing more nuclear plants on line.

Of course, on both sides of the debate reasonable people acknowledge that some mix of conservation and production is necessary. But all insist that their policy recommendations will result in the right mix, or that the other side’s recommendation will result in the wrong mix.

Which side is right? What is the best combination of production and conservation? The answer is, no one knows. No one! No individual or group of experts in Washington, D.C., or anywhere else, has a clue about how much energy we should conserve or produce.

But We Can Find Out

But the information necessary for determining the best balance between conservation and production does exist, partly in the form expert knowledge on the technical details of recovering energy resources, converting those resources into usable energy, and transporting it to users. This information is possessed by tens of thousands of people scattered all over the world, few of whom have direct contact with each other. Yet somehow, if energy decisions are to be sensible, it all has to be collected, given proper weight, and communicated to those who can make the best use of it.

Equally important information has nothing to do with expert knowledge and is even more widely scattered: the information that millions of people have about their circumstances and preferences, and the tradeoffs they are willing to make. Some can easily take the bus to work, while others live in areas or have jobs that make taking the bus extremely difficult. Some wouldn’t mind shifting to smaller cars, while others with growing families and special needs would. Some would suffer little discomfort from a wider range of inside temperatures, while those with

certain health concerns would suffer more than discomfort. Some people are simply afraid of the dark and are willing to sacrifice other things to keep the lights on at night. This information is not only more fragmented and dispersed than the expert information, it is highly subjective and impossible to articulate precisely, if at all. This information may seem rather mundane, but it is just as essential to sound energy choices as is the scientific knowledge possessed by experts.

Fortunately there is no need to collect all this information in one place so it can be run through a computer to determine the right amount of conservation and production—even if all the information were collected, no computer could process it all—and even if it could, by the time the processing was done, the information would have changed. The only way that the information needed to make sensible energy decisions can be communicated by those who have it to those in the best position to respond appropriately to it, and communicated in a way that motivates appropriate responses, is through market prices—assuming these prices are not distorted by politically imposed caps.

Market prices allow consumers to inform producers, and one another, how much they value different energy uses, and allow producers to inform consumers how much it costs to provide different types of energy. In response consumers will decrease their energy use in ways that minimize their inconvenience when that inconvenience is less than the value of the energy saved. And producers will expand production of energy sources that provide the most value to consumers for the cost required, and will expand those sources as long as consumers value the additional energy by more than the value sacrificed to produce it. The result is a combination of conservation and production that best harmonizes the interests of us all.

Price communication doesn't work perfectly, and even without price caps it can be argued that markets don't guarantee exactly the right amount of energy conservation and production. But energy decisions made in response to the information provided by market prices are far better than those that will be made by politicians and bureaucrats in the informational vacuum they create by imposing price caps.

Concluding question: Compare the efficiency of the energy decisions made by private individuals responding to price signals to the efficiency of the decisions made by government officials responding to political considerations.

Reference:

Lee, Dwight R. "Energy Production versus Conservation," The Freeman: Ideas on Liberty - December 2001. Retrieved from the World Wide Web on 20 November 2014 at http://www.fee.org/publications/the-freeman/article.asp?aid=3457.