

IF ENERGY EFFICIENCY MAKES SO MUCH SENSE, WHY AREN'T WE ALREADY DOING IT?

There is an old joke in which two economists are walking down the street when one of them spies a \$20 bill lying on the ground. He says to his friend, “Hey, there’s a \$20 bill on the ground!” To which the other economist replies, “That’s impossible. If there were a \$20 bill on the ground, someone would have already picked it up.”

When it comes to energy efficiency in the Maryland, there are \$20 bills lying all around us – good opportunities to reduce our environmental impact, curb our dependence on imported energy and boost our economy, all at the same time. Yet most of these opportunities currently go unrealized. Why?

Here are 10 reasons why economically beneficial energy efficiency investments aren’t made as often as they should be:

1. Bad incentives – Utilities typically make more money through increasing sales of energy. For example, a 5 percent reduction in energy sales for an electricity generation, transmission and distribution utility could reduce its overall earnings by up to 25 percent. For a utility focused only on electricity distribution, such a reduction in sales could reduce its overall earnings by as much as half.¹ This sends a perverse signal that undercuts energy efficiency.

2. Split incentives – Often, the person who is the most logical candidate to install energy efficiency improvements is least likely to benefit from them. Consider landlords, who maintain buildings but whose tenants generally pay the energy bills. Or builders, who (in the absence of good consumer benchmarks (see #5), face incentives to minimize construction costs rather than make buildings as energy efficient as possible.

3. Missing incentives – Every consumer who saves energy reduces demand, which lowers the cost of energy for everyone. A homeowner who installs efficient lighting or an efficient furnace reduces the need for a new power plant or transmission wire, thus saving other ratepayers money. However, individuals who pursue clean energy changes are rarely compensated for the benefits they deliver to the rest of society.

4. “Sticker shock” – Consumers often value lower sticker prices for products, appliances and homes, even when they can save money in the long run by purchasing more energy-efficient models. This is particularly true when it is hard to differentiate between the efficiency of two different products (#5) or when it is hard to predict future savings (#6).

5. Lack of knowledge – Even consumers who want to buy more energy efficient products sometimes find it difficult to tell which products are truly energy savers. While the Energy Star® program helps consumers make good choices for appliances and new homes, many products – including existing homes – are not “labeled” for their energy efficiency performance. In addition,

consumers might not even be aware of new technologies that can tap renewable energy resources.

6. The “crystal ball” problem – Energy prices are notoriously volatile, making it hard for consumers and businesses to make educated decisions about future investments. Investing in a fuel-efficient vehicle, for example, appears a lot more attractive when gasoline prices are at \$3 per gallon than when they are \$1.50 a gallon. Yet, there is no guarantee that gasoline prices will remain high over any given period of time, thereby justifying the investment.

7. The “small potatoes” problem – For some businesses, energy costs are such a small part of their overall costs (compared, for example, to labor) that they attract little managerial attention. There may simply be no one whose job it is to look for ways to save energy cost-effectively – even when those opportunities exist. In addition, some businesses may lack access to capital to finance energy efficiency improvements.

8. Bureaucratic inertia – Bureaucracies are often slow to react when conditions in society change. Thinking of efficiency as a resource, rather than simply working to extract and use more fuel resources, is not yet adequately widespread. Old rules often favor supply-side measures. Renewable energy sources such as wind power and solar energy are fundamentally different from the big, central-station power plants that preceded them, and the old rules that applied to those power plants do not always function efficiently.

9. The “chicken and egg” problem – Billions of dollars have been invested over the years in building up Maryland’s energy and transportation infrastructure. These historical investments can make it difficult for new technologies to compete. For example, few people will buy a zero-energy home if builders are not producing them in adequate numbers. But builders won’t produce them unless they perceive adequate demand. This “chicken and egg” problem discourages research and investment in technologies that can dramatically change the way we use or produce energy.

10. The “pain in the neck” factor – For some individuals, time is a more precious commodity than money. If installing a solar water heating system or making energy efficiency improvements is too hard or too time-consuming, only the most dedicated consumers will do it.

Public policy can play a critical role in surmounting these barriers. Government can establish mandates for energy efficiency and renewable energy, thus setting a high “floor” for the penetration of clean energy in the economy. Government can also offer financial incentives, public education programs, energy audits and technical assistance to help individuals and businesses take advantage of their clean energy potential.

ⁱ Wayne Shirley, Regulatory Assistance Project, *Barriers to Energy Efficiency* (presentation), undated, downloaded from www.raponline.org/Slides/MACRUCEnergyEfficiencyBarriersWS.pdf on 8 February 2008.