

 △ Contact Dr. Daryll E. Ray at the UT's Agricultural Policy Analysis Center by calling (865) 974-7407,faxing (865) 974-7298, or emailing dray@utk.edu.
For more info, visit: www.agpolicy.org



Energy Cost: Pay Now Or Pay Later

No matter what one thinks about the proposal of the Obama administration to eliminate direct payments to farms with gross sales in excess of \$500,000, it is becoming clear that they want to put their own imprint on farm policy. That can be seen in the argument that farmers could make up their loss of direct payments with payments for environmental benefits and carbon sequestration.

The issue of improving the environment through carbon sequestration fits in with the emphasis Obama has given to green energy investments, the reduction of atmospheric emissions of fossilfuel-based carbon dioxide, and reducing the dependence of the US on imported oil.

Farmers have made significant investments in biofuels as a means of both increasing farm income and reducing the number of barrels of oil that are imported by the US every day. Public support is conditioned on the ongoing acceptance of these goals as important elements of public policy.

On a recent trip to talk to farmers in Texas, a look out the window as the plane landed at Abilene gave evidence of the benefits that farmers can receive from green energy – at least farmers who live in windy places. Here in east Tennessee we don't see many wind turbines, but the Abilene landscape was dotted with a large number of them being used to generate electricity. Farmers receive a variety of payments for turbines that are located on their land.

What about the carbon sequestration issue? Encouraging new forms of energy generation such as from wind and solar is one thing – achieving a switch in technologies of existing electrical and other plants to reduce atmospheric emissions is quite another.

In some ways action or inaction on the carbon sequestration issue will reveal how serious we are about moving to a new energy paradigm.

If we are really serious about reducing our atmospheric emissions of fossil-fuel-based carbon dioxide (CO_2), there are two ways to go about the task: write regulations or provide incentives.

Regulation has been the traditional way of achieving a policy goal like CO_2 reduction. Fossil fuel burning power plants can be required to install equipment to prevent CO_2 from entering the atmosphere. The regulations can be implemented in a number of different ways.

Critics of environmental regulation argue that they add to the cost of electricity for consumers so in some way they are an indirect tax on all electricity consumers. Labeling something as a tax is a way to get the attention of many voters.

Another argument is that regulation is inefficient and greater CO_2 reduction can be achieved at a lower cost by providing incentives to the companies involved. One way to provide those incentives in through a cap and trade program.

In some ways cap and trade is an indirect means of regulation in which the government sets a cap on CO_2 emissions that is lower than the current level and then allows the companies involved to determine how they are going to achieve the goal of the reduction of CO_2 emissions.

They can achieve their CO_2 goal by making in-

vestments that increase the plant's efficiency in fossil fuel use or they can purchase the right to emit CO_2 above their "cap" by buying carbon credits from companies or proprietorships that have accomplished carbon reductions in excess of their cap. So where do farmers come in?



DR. DARYLL E. RAY Agricultural Economist University of Tennessee

Farmers can engage in carbon sequestration in the soil through activities like no-till planting or converting some land to permanent pasture. Farmers could then sell carbon credits at the going market rate for the amount of the carbon they incorporate in their land. There are currently a few programs of this type operating in the US.

It has been suggested that farmers could receive tremendous benefits from a cap and trade program. It would seem that the benefits would depend on how much carbon they could sequester on their land, the cost of implementing sequestration practices, and the price of carbon credits.

Would farmers receive credits for land that is already no-tilled or converted to pasture? If the net positive level of carbon sequestration was achieved five years ago then there could be some leakage depending on how the program is administered.

What about farmers in the flat areas of places like Illinois and Indiana and areas in which minimum till already is the dominate production practice? How do they qualify for payments to offset the direct payments they are currently receiving?

To what extent would farmers be able to sell credits for a reduction in the amount of fossilbased fuel they use in their farming operations?

These are just a few of a bunch of questions that need to be addressed as policies are developed to reduce CO_2 emissions via a cap and trade program.

One argument against cap and trade is that the "worst" polluters can, in effect, purchase a license to continue to pollute. In addition, anticipation of a forth coming cap and trade program provides an incentive for companies to bring new fossil-fuel fired plants online as quickly as possible so they can receive a greater initial carbon allowance.

Another argument against cap and trade is that the combined cost of purchasing credits and making plant changes to meet or exceed environmental caps would increase the cost of electricity, not unlike regulation and the indirect tax augment.

The bottom line is, if we are serious about reducing CO_2 emissions and sourcing energy from increasingly more renewable sources, it is going to cost us one way or another.

On the other hand, the proponents of limiting CO_2 emissions and reducing our dependence on imported oil argue that the cost of doing nothing would be greater than either regulation or the provision of incentives. Δ