This summer, the Obama administration released the President’s Climate Action Plan. It is a grab bag of regulations and policy initiatives aimed at reducing the nation’s carbon emissions, which many scientists believe contribute to global warming.

This got me to thinking: What might I do to reduce my own carbon emissions? Here are some things I came up with. Think of them as Greg Mankiw’s Climate Action Plan.

- I could buy a smaller, more fuel-efficient car.
- I could swap my traditional car for one with new technology, like a hybrid or an electric vehicle.
- I could car-pool to work.
- I could use public transportation.
- I could move closer to my job.
- I could buy a smaller house that requires less energy to heat and cool.
- I could adjust the thermostat to keep my home cooler in winter and warmer in summer.
- I could put solar panels on my roof.
- I could buy more energy-efficient home appliances.
- I could eat more locally produced foods, which need less fuel to transport.

I could go on, but by now you get the idea. Every day, we all make lifestyle choices that affect how much carbon is emitted. These decisions are personal but have global impact. Economists call the effects of our personal decisions on others “externalities.”
The main question is how we, as a society, ensure that we all make the right decisions, taking into account both the personal impact of our actions and the externalities. There are three approaches.

One approach is to appeal to individuals’ sense of social responsibility. This is what President Jimmy Carter did during the energy crisis of the 1970s. He encouraged Americans to adjust their thermostats and insulate their homes. I can still picture Mr. Carter sitting in the chilly White House, wearing his cardigan sweater.

It’s true that as a socially responsible economist, I always weigh the global costs and global benefits before pushing the ignition button on my car. (Yes, my tongue is firmly planted in my cheek.) But expecting most people to act this way is unrealistic. Life is busy, everyone has his or her own priorities, and even knowing the global impact of one’s own actions is a daunting task.

The second approach is to use government regulation to change the decisions that people make. An example is the Corporate Average Fuel Economy, or CAFE, standards that regulate the emissions of cars sold. The President’s Climate Action Plan is filled with small regulatory changes aimed at making Americans live more carbon-efficient lives.

Yet this regulatory approach is fraught with problems. One is that it creates an inevitable tension between the products that consumers want to buy and the products that companies are allowed to sell. Robert A. Lutz, the former General Motors executive, laments that CAFE standards are “a huge bureaucratic nightmare.” He says, “CAFE is like trying to cure obesity by requiring clothing manufacturers to make smaller sizes.”

Yet another problem with such regulations is that they can influence only a small number of crucial decisions. In a free society, the government can’t easily regulate how close I live to work, whether I car-pool with my neighbor or how often I don a cardigan. Yet if we are to reduce carbon emissions at minimum cost, we need a policy that encompasses all possible margins of adjustment.
Fortunately, a policy broader in scope is possible, which brings us to the third approach to dealing with climate externalities: putting a price on carbon emissions. If the government charged a fee for each emission of carbon, that fee would be built into the prices of products and lifestyles. When making everyday decisions, people would naturally look at the prices they face and, in effect, take into account the global impact of their choices. In economics jargon, a price on carbon would induce people to “internalize the externality.”

A bill introduced this year by Representatives Henry A. Waxman and Earl Blumenauer and Senators Sheldon Whitehouse and Brian Schatz does exactly that. Their proposed carbon fee — or carbon tax, if you prefer — is more effective and less invasive than the regulatory approach that the federal government has traditionally pursued.

The four sponsors are all Democrats, which raises the question of whether such legislation could ever make its way through the Republican-controlled House of Representatives. The crucial point is what is done with the revenue raised by the carbon fee. If it’s used to finance larger government, Republicans would have every reason to balk. But if the Democratic sponsors conceded to using the new revenue to reduce personal and corporate income tax rates, a bipartisan compromise is possible to imagine.

Among economists, the issue is largely a no-brainer. In December 2011, the IGM Forum asked a panel of 41 prominent economists about this statement: “A tax on the carbon content of fuels would be a less expensive way to reduce carbon-dioxide emissions than would a collection of policies such as ‘corporate average fuel economy’ requirements for automobiles.” Ninety percent of the panelists agreed.

Could such an overwhelming consensus of economists be wrong? Well, actually, yes. But in this case, I am confident that the economics profession has it right. The hard part is persuading the public and the politicians.