James Hansen

The commercials are low-key, but omnipresent. Gentle, warm encouragement, the key message only implicit: vote for the political candidates on the take from the fossil fuel industry.

"I am an energy voter" commercials are from skilled professionals and they are persuasive. They promise jobs, low prices at the pump, warm homes, and energy independence for our nation.

Benefits for all, or so it seems. In reality, in the end, benefits flow mainly to a handful of people, the fossil fuel magnates, who prefer to be anonymous.

"I am an energy voter" commercials, in effect, ask us to place our offspring on a sacrificial alter. As we raise the knife, unlike Abraham, we hear no voice telling us to stop, to put down the knife. Young people do not cry out. Adults are fooled and compliant.

Yet the science is crystal clear. We have a climate and energy crisis, an emergency. Regional climate change is beginning. In the U.S. Southwest it means increasingly hot summers, stronger droughts, more extreme fires, and when rain occurs, heavier rain and floods.

As climate change grows, rapidly shifting climate zones will drive many species to extinction. As many as half of all species could be committed to extinction by the end of this century.

The largest economic effect will occur via rising sea level, as ice sheets begin to collapse by midcentury. More than half of the world's largest cities could become dysfunctional this century.

Social and economic disruptions from such consequences would be devastating. It is not difficult to imagine that conflicts arising from forced migrations and economic collapse could make the planet ungovernable, threatening the fabric of civilization.

Halting climate change requires fossil fuel phase-out in a few decades, thus emission reductions of several percent per year. Informed politicians understand the situation, but are afraid to tell the public what is needed. They feel impotent in competition with "I am an Energy Voter."

In the United Nations Paris Accord last December world leaders promised to try to reduce future emissions. These politicians shamelessly clapped each other on the back, pretending they had accomplished something important. However, they had agreed beforehand not to even discuss the only action that could rapidly reduce global emissions.

It is not rocket science. As long as fossil fuels are the cheapest fuel, they will be burned. Fossil fuels only seem cheap, because the price does not include their full cost to society. Human health costs of pollution are borne by the public, not fossil fuel companies. Growing costs of climate change are also borne directly by the public or by governments, which also means the public.

Fossil fuel prices can be made honest by collecting a rising carbon fee from fossil fuel companies at the domestic sources of oil, gas and coal, i.e., the domestic mines or ports of entry. If the

money is distributed 100 percent to the public, an equal amount to each legal resident, it is revenue neutral. Thus it is not a tax and does not make the government bigger.

A carbon fee makes fossil fuels more expensive, allowing clean energies and energy efficiency to compete. Almost two-thirds of the public, people doing better than average in limiting their fossil fuel use, would receive more in their monthly dividend, transferred electronically to their bank account or debit card, than they pay in increased prices.

This carbon "fee & dividend" is progressive. Wealthy people, who travel more and have larger houses, have a large carbon footprint. Given today's income disparities, this modest change seems beneficial, giving the little guy something to build on, if he uses the dividend wisely.

By the time the fee reaches \$100 per ton of carbon dioxide, it will add \$1 per gallon at the pump, but the annual dividend will be about \$1500, thus \$4500 for a family with two or more children (half shares for children). Incidentally, the fee & dividend will provide a big incentive for illegal immigrants to become legal or go home.

Economic studies show that fee & dividend spurs the economy, creates millions of jobs, and increases gross domestic product. It modernizes our energy infrastructure, and our manufacturers will have products to sell worldwide.

A rising carbon fee is the only practical way to phase down global emissions. If the U.S. and China agree to a carbon fee, it can become near global. Participating nations would place a border duty on products from non-participating nations and give fee rebates to domestic manufacturers exporting to the latter nations.

Citizens Climate Lobby, which now has 265 chapters in the U.S., and I have proposed fee & dividend to numerous politicians. Liberals tend to say "let's use the fee for social programs or invest it in solar panels." Bad idea. Let the market choose among technologies and efficiency. Conservatives say "let's use the fee to reduce taxes," usually specific taxes rich people abhor.

Tell both parties "thank you very much, but we have uses for our money." If they cannot understand, it will be time for a third party, a centrist party, let's call it the American Party.