Back in 2001 the conservation industry thought conservation would occur as soon as oil was $100.00/barrel. Books were written about it.

Now we have a deadline of 2050 for climate change. The need now is to penalize carbon emissions at all levels from consumers for heat and autos, to industry.

The gradual implementation of a carbon tax on all carbon based sources will be necessary to encourage conservation and a changeover to renewable energy. With gradual increases, a carbon tax base will grow as the years pass to begin to make alternative energy sources competitive. Business and personal budgets will adjust to paying their fair share for pollution. As the taxes increase, the consumer will think more about their personal need to conserve and change energy use habits. Carbon emission fuel based methods will be priceed out of competition with renewable sources. As electric vehicles become more pervasive, road taxes will have to be collected at ez-pass tolls and charging stations. States will charge greater highway taxes at registration.

So what happens to the collected funds? The money can be used to finance infrastructure changes as do highway taxes. Some will be set aside to fund the transition to renewable energy technologies. The changes needed in the electric grid of distribution will have to be changed completely. Overhead wires will have to be enlarged and buried to handle the load. The grid will have to be reconstructed to bring renewable from the wind and solar farms in the country to the city. It may even involve society leaving the city for decentralized supplies of electricity. The pandemic has already disrupted the notion of cities.

So what needs to be taxed? All carbon emission sources, from methane producing cattle, transportation fuels, carbon emitting heating fuels, trash, electricity generation, heating and cooling of buildings, railroads, ships, and solar fields will need to pay their fair share.

Electric utilities will have to raise rates to finance future infrastructure changes to bring the renewable non-carbon emission electric power to the increased demand for transportation, industry, consumers and government to heat buildings and homes.

The key is to begin the understanding that everyone is going to have to change, and pay for the change. With gradual implementation, society can adjust to the gradual change as the carbon tax increases over the next 20 years. The amount of money will be massive as the process progresses.

We have all witnessed the need for education and repeated messages about the needs, during the recent Covid 19 epidemic. A greater effort will be needed to educate and gain the cooperation of all citizens, to make real progress for carbon emission reduction. This is not going to be easy. The epidemic came out of nowhere, and will be dealt with in record time. The environmental climate problem has been with us for 100 years. It is never going to go away. The importance and the urgency require us to move with purpose and determination from now, well on into the future.

We will never be free of carbon use. Even with the transition to greater use of renewable energy, we will still have to maintain our carbon infrastructure. The recent power failure in Texas demonstrates the need for current systems to be kept in place as back up to a frail electric grid. This does not reduce the requirement that we install electric heating and cooling and appliances as soon as possible. The reliance on carbon fuels to heat, bath and cook can be reduced now with electric means for the bulk of our needs.

Conservation to improve energy use by making our buildings and homes less energy intensive, with insulation, window renovation and heating system efficiency will eventually pay off in reduction of current carbon emissions and the need for reduced renewable electricity sources in the future.

Folks must realize, over time, the necessity of having all carbon users pay and play for the transition from an unacceptable coexistence with their environment to a more sustainable relationship.

The need for change will have to be sold to the people. Politicians will need to embrace the need, or be replaced by those that can.