

THE PRINCETON PACKET



SOLUTIONS

By Huck Fairman

Our future, our responses regarding climate change

As many Americans look back 50 years at the extraordinary national effort to send men to the Moon, we find ourselves facing another huge challenge: tackling the climate crisis.

To quote President Kennedy speaking of the Moon project, "... that goal will serve to organize and measure the best of our energies and skills ..."

But unlike the Apollo Project, today's situation is as many have warned, existential and global.

What is it we face? Two-thirds of the United States is expected to experience record high temperatures along with high humidity, as we are covered by a "heat

dome," extending from the middle states to the East Coast. Will Iowa farmers, already ravaged by floods, be able to grow their corn in such heat?

Along the East Coast, the stalled or "wavy" jet stream will hold the heat in place and help produce unhealthy smog, along with the heat. The frequency of heat waves, where the night time temperatures do not fall significantly, has increased nationally from 2 per year in the '60s to 6 per year in the 2010s.

That number could double in the coming years. And the heat wave season has expanded by 45 days. East Coast city temperatures, and heat indexes (what it feels like), have reached to and above the 100 degree levels. The urban poor, for a variety of reasons, suffer disproportionately. But, it is predicted that the South East United States and the southern Great Plains will bear the brunt of the warming.

The predicted hotter future will be, and is even today, hotter than we imagined. One reason is that the Arctic permafrost is melting at rates 70 years ahead of predictions, with Arctic temperatures reaching 84 degrees. That melting is and will be, releasing methane, which is a more thorough heat-trapping gas than CO₂.

So what do we do?

The responses have been well publicized. Anyone who reads or surfs the internet knows that we have to reduce the usage of fossil fuels and turn to green power. We need to do this at all levels, individual, community, regional and national. The question is: do we have the wide-spread will to do so?

Many have responded by turning to electric vehicles, solar panels and a slew of technological innovations and improvements to reduce energy usage and transform energy production to green energy. But to save the environments we live in and depend on, many more of us must join in and expand efforts in all directions, from preserving and growing forests and open spaces, to increasing biking, installing heat pumps in buildings, to painting roofs white, creating green roofs, and designing "passive" houses or businesses.

The scale required to save our world is so all-encompassing that only governmental leadership, as with Apollo and as with the international effort to ban chlorofluorocarbons that were destroying the Ozone layer, will be able to orchestrate the needed changes.

The Paris Climate Accord, minus the Trump Administration but not necessarily individual state governments, along with a number of nations (and some of those state governments), have been taking steps to reduce emissions. The hope is that all such efforts will be expanded.

But those efforts are not without opposition, political and commercial ... which public pressure can overcome. Exxon's scientists found in the 1970s that emissions from their industry would lead to the climate impacts we are now experiencing. But Exxon hid those findings. The public should avoid Exxon and turn to electric vehicles. Investors should divest from all fossil fuel companies.

The impacts of this warming are global. Some of India's cities are running out

of water. The glaciers in the Himalayas, that have provided water for over one billion people are melting. Other cities, Sao Paulo, Brazil, Cape Town, South Africa, and Mexico City may also soon run out of water. In fact, nearly half of the human population is already living with "water scarcity," which affects not only drinking but cooking and sanitation.

We have seen in Syria and in Central America the effects of draught coupled with governing dysfunction. We have our own struggle between those who recognize the crisis and the need to respond, and those who deny or oppose governmental intervention.

But there are encouraging signs. New York State, which recently passed laws to reduce emissions, announced an agreement to fund two large, off-shore wind farms. New Jersey, Rhode Island and Virginia have such projects in development. California is looking at floating wind turbines. England and a number of northern European countries are far ahead in generating power from wind farms.

The Ancient Greek Philosopher Plato worried that democracies would not work well if its populations would not read and educate themselves. Polls here show that now over 60% - maybe even 70% - of the population is familiarizing itself with science, is acknowledging the heat and is recognizing that global warming is a man-made threat that needs to be addressed, in order to head off the worst impacts. Perhaps the heat of this summer, and particularly this last week, will push more people to act and urge action.