## Joel Black

Clearly politicians are not scientists, and clearly politicians do not consult with scientists. I love EV's, and will be buying one soon, but it is BAD policy to require them--bad for economics, bad for poor people, bad for the environment, bad for national policy.

Manufacturing windmills, batteries, solar panels and EV's takes up to 80 times as much energy as making gasoline engines. That is 80 times the carbon footprint. The de-commissioning and disposal of these products also takes 12 times as much energy and carbon as it does to recycle a car through the junkyard and the metal smelters. Only during its life on the road is an EV's carbon output lower than a gasoline powered car, and only during its generating years is a windmill or a solar cell less polluting than a coal-fired power plant.

But the electricity itself to run the EV's has to come from somewhere, and only hydro and nuclear facilities have a lower carbon footprint than burning fossil fuels. Solar creates 3 times and wind creates 2 1/2 times the carbon footprint of burning fuels for electricity (across the entire process, as already explained.)

Therefore, requiring EV's, which already cost twice what gasoline vehicles cost, and have less luggage and towing capacity, also contributes to global climate problems, while squeezing the poor, the middle class, and every taxpayer. Every EV on the road will, by the end of its life, generate 2 1/2 times the carbon output of a gasoline powered car. To require EV's is bad policy. It is, in fact, tyranny--grinding the faces of the poor.

The carbon solution, of course, is to shift the manufacturing and the disposal to Asia. It builds their economy and pollutes their country. We escape the carbon. We also escape the economic development, and we avoid all the jobs which the poor depend upon to raise their standard of living, sending them to our fellowmen in other countries. How generous of us. Asia increases in power and influence while we shrink until we disappear.

Do whatever it takes to shut down this destructive idea. EV's for those who want them, yes. Required--no way.