Dan Adams

Governor Inslee has ordered the Washington Department of Ecology to ban the sale of new gasoline and diesel powered motor vehicles because he knows that electric vehicles are fundamentally less flexible and capable than ICE vehicles, and rather than letting the market sort it out, he opts to force the public to follow his dictates.

Electric vehicles can be a great option for a limited subset of vehicle purchasers. These purchasers are disproportionately urban, with predictable commutes, who are homeowners with at least a level 2 charging station in their garages, who live in warm weather climates, and who rarely take long road trips. This matches the Democratic voting base to a tee. Meanwhile, we have others in our state who are rural, who drive long distances to unpredictable places, who rent and cannot enjoy charging at home, and who frequently take long road trips into the vast empty spaces of this country. EVs are a poor choice for these consumers now and will continue to be in the future as well.

EVs can lose up to 1% of their charge daily while sitting unplugged. An ICE car can sit idle for a month without any action, and if the owner disconnects the battery cable, the car can be mothballed indefinitely before being brought back into immediate service.

EVs rely upon an increasingly fragile power grid, which is itself subject to blackouts from high summer loads, violent windstorms, and crippling ice storms. ICE vehicles are self-sufficient, aside from infrequent trips to a gas station to refill.

EVs lose double digit percentages of range in frigid weather. While Puget Sound is usually mild, we have areas in our state that fall below 0 degrees F most winters, and these are rural communities where the reduced range of EVs is already an issue. If someone in the Okanogan cannot make it into town because of extreme cold compromising their vehicle's range, it could become a life and death issue.

EVs also generate no engine heat of their own and have to use the battery to provide cabin heat. The "waste" heat of an ICEV is put to good use in the winter defrosting windows and melting snow from the hood before it blows off, obscuring vision. An EV provides none of these benefits and must steal from the vehicle's range in order to provide vital heat.

EVs are slower to charge than an ICEV is to refuel, and will remain so for decades. People who live in rental housing or who otherwise cannot charge at home will be greatly inconvenienced by having to sit around for an hour at a charging station....even if they can find an open charging spot. Even once the infrastructure is fully built out to provide charging facilities to people away from home, the delay will still exist.

EVs have lower energy density than ICEVs and will never catch up. All the low hanging fruit in battery energy density is gone. Lithium is the lightest metallic element, and further improvements to battery energy density will be decidedly incremental. There are no more technological revolutions to be had in the battery space, at least not in this universe.

EVs are terrible vehicles for towing and will remain so forever. Range can fall by over 50% with even a modest trailer attached. There is no solution on the horizon for this problem.

EV batteries are long-term consumables that will wear out before the rest of the vehicle. Costing well over \$10,000 to replace, this becomes a major cost burden for owners of old EVs and will cause many owners to send their vehicles to the crusher rather than repairing them. How does it benefit the environment to throw something away needlessly?

EV batteries are also fire hazards on the road that present risks to emergency services personnel. While thankfully EV fires are somewhat rare, when an EV becomes fully engulfed, firefighters frequently have to retreat and let the lithium fire burn itself out. It is incredibly difficult to break the fire triangle on a reactive alkali metal fire.

In summary, for all the virtues that EVs have in terms of torque, acceleration, carbon footprint, etc., EVs have not secured any more than a niche following in the marketplace, and this is for a very good reason. Innovation occurs when consumers are allowed to choose. What our state government is doing instead is depriving consumers of that choice and attempting to innovate through government fiat. The project is doomed to fail, no matter the Pollyanna vision of EVs that our statewide elected officials promote. ICEVs are versatile, which is why the vast majority of households with an EV keep an ICEV in reserve to do the jobs that the EV won't do.

The proposed rule is counterproductive and should not be enacted.