In the 1950s Ford had a very strange vision. They imagined a world in which petrol was unnecessary. A world in which cars ran on a very alternative power source. Nuclear. Ford came up with the Ford Nucleon concept car. This was interesting because the car used a small nuclear reactor in the rear of the car. Ford believed that this reactor would use uranium to create a process of nuclear fission. Ford never built a full prototype of their car so people can only speculate on how this car would work but what people mainly think how this car would work is that the nuclear fission process would create heat which would covert water into steam and create electricity which would drive a motor to drive the car.

Obviously, the idea of the Nucleon never caught on, but it got me thinking. Technology has improved tremendously in these last decades, so could nuclear power contribute to our energy needs in the 21st century. Well, the idea of moving a vehicle with a nuke isn't totally absurd. This is exactly how nuclear submarines work, the reactor creates heat, which boils the water, which runs the turbine that causes the submarine to move. But the nuclear reactors on submarines are massive so surely, they can't work on a car. Well, actually back in 2020, Mr. Donald Trump issued an executive order that promoted small modular nuclear reactors (SMNRs) for use in defense and space exploration.

NASA then went ahead and created a prototype called KRUSTY which stands for Kilopower Reactor Using Stirling Technology. Plus, it wasn’t all that big. It stood around 2 meters. With some elbow grease you might just be able to place that longitudinally under a bonnet. Sadly, it wasn’t that powerful either, KRUSTY only made 1 kilowatt of power which is only about 1.3 horsepower. This was definitely not strong enough to drive a car, but it was an interesting proof of concept. The best part of this was that the power would last for decades. So, would it be possible, no and by no, I mean no thank you. Even after we think about power, what about safety, imagine if a nuke on wheels smashed into another nuke on wheels on the road, it would be terrifying. Nuclear power stations need layers upon layers of shielding and a containment shelter made of concrete that is several feet thick and I am pretty sure you can't do this on a car.

So, are there other ways nuclear power could help cars? Well yes, nuclear power in 1996 took up 17.5% of the worlds energy creation which meant it was good but not good enough to mass produce. In fact, this year Rolls Royce was commissioned by investors and the UK government to create a small modular reactor, essentially these are small power stations which are only 1/10 the size of a proper reactor which would only be the size of 1 football field, and these would create 470 megawatts of power, that is already 470 thousand times KRUSTY. This would be enough power to power 1 million homes, we do not know if these will be employed yet, but the point is to create a system to work in the UK. Since more of us are going electric every day having an extra amount of electricity for our homes in a grid is necessary. So maybe nuclear energy will help your car get the energy it needs.

So maybe nukes on wheels will not be a reality but they can create energy for everything and not just cars.