

Twitter Thread by Pepetideo



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@pepetideo



I hate to correct @elonmusk, but his assertion that it takes 20 years to replace the vehicle fleet is wrong. This thread tries to describe why. 1/

His 20 year replacement timeline is based in the normal rate of car manufacturing/car retiring and total global fleet size. Both of these will be disrupted 2/

Whilst I don't expect total car manufacturing rate to increase much, with the introduction of cheap autonomous taxis networks, the number of cars being retired will increase very fast especially with people living with urban settings where these networks will become ubiquitous 3/

And in the more rural / commuter belt 2 car families will become 1 autonomous car families.

This will drastically decrease the total size of the global car fleet as the rate of cars retiring will be at least twice the size of the cars being retired 4/

As time progresses, legislation increasing taxes on polluting cars (ICE) and restrictions on where those cars can travel to will make them increasingly stranded/decreasing value assets on a household and further increase the retiring rate of ICE vehicles 5/

Finally, when 100% of cars being manufactured are electric, with every passing year, the economics of gas pumps become unviable and these start to close/being repurposed. As fuel stations close they scarcity will mirror today's pain points of lack of charging infrastructure 6/

And this again puts further pressure on ICE owners that will start retiring their cars and a faster rate.

This becomes a feedback loop what will both decrease the vehicle fleet and collapse the value of ICE cars. 7/

This means that the total fleet refresh will not take 20 years as it occurs today. 8/

I expect that from the year when the majority of cars sold are EV the transition will take 10 years & we'll end up with a smaller fleet (average of less than 1 car per household) & where the large majority of miles driven per year will be done by autonomous taxis end/

