Oh, electric vehicles (EVs), the superheroes swooping in to save us from the dastardly clutches of climate change! Or so we're told. Sure, they may help reduce emissions, but let's not crown them the messiah of environmental salvation just yet. If you're thinking, "But electric cars are clean, right?" Well, think again, dear eco-warrior. While EVs produce fewer emissions when driving, manufacturing their batteries emits significantly more CO_2 upfront—about 70% more than a regular gas (petrol) car. According to a 2023 study[1] co-authored by Jarod C. Kelly from the DOE's Argonne National Laboratory - USA, an electric vehicle would need to be driven about 19,500 miles (or 31,000 kms) to offset the higher emissions from manufacturing compared to a gasoline car. As the electrical grid incorporates more renewable energy, this payback period will shorten, further enhancing the environmental benefits of EVs.

Here's the kicker: with EVs (and Autonomous Vehicles[2] or AVs), the plan isn't to have *fewer* cars on the road, but to just *add* smarter ones. And what happens when self-driving cars are zipping around? You're more likely to take a joyride to that coffee shop down the street or request an AV to pick up your groceries that you could've just biked to get. Welcome to the world of *Jevons Paradox*, where efficiency improvements increase consumption, not reduce it. You know, it's like swapping out your incandescent lightbulbs for LEDs—yes, your energy bill drops, but then you leave the lights on longer because you feel so virtuous. This sneaky little paradox is set to haunt the dream of EVs and their fancier cousins, Autonomous Vehicles (AVs). It's like fighting obesity by just switching to low-calorie junk food: you feel great, but it's still junk food. The more convenient, cheaper, and greener the tech, the more people are likely to use it—and use it *more*. So instead of addressing traffic congestion or climate impact, AVs might just flood the roads with more *empty* cars cruising around to pick up their next fare, exacerbating the very problem they were designed to fix. More cars ≠ fewer emissions. Funny how that works, huh?

And let's not forget, we're not stuck in traffic, *we are* the traffic. EVs are like replacing fossil-fuelled chaos with battery-powered traffic jams. Sure, these futuristic robo-taxis like Waymo and Cruise seem like the Jetsons' dream come true, but don't forget, they're still cars clogging up the streets—especially when a few decide to stall in the middle of intersections or roll over a fire hose in an emergency. Not exactly the picture of seamless urban efficiency! So, while tech bros pitch AVs as the solution to gridlock, all we might be doing is trading one car-clogged apocalypse for another, only this time the cars talk back and come with built-in trivia games. So, what does replacing cars with *more* cars look like? Pretty much the same traffic jam, just with fewer drivers getting road rage and more tech bros high fiving over their cool new robot fleet. Efficient? Maybe. The real solution? Perhaps not!

But there's a deeper truth here that we can't ignore; **we need to do some serious introspection about how we live our lives**. Americans, on average, drive 13,476 miles per year, or about **37 miles** every day, or about **60 kms**. That's a lot of fossil-fuelled or battery-powered vroom-

[1] Kelly, Jarod C., Elgowainy, Amgad, Isaac, Raphael, Ward, Jacob, Islam, Ehsan, Rousseau, Aymeric, Sutherland, Ian, Wallington, Timothy J., Alexander, Marcus, Muratori, Matteo, Franklin, Matthew, Adams, Jesse, and Rustagi, Neha. 2023. "Cradle-to-Grave Lifecycle Analysis of U.S. Light-Duty Vehicle-Fuel Pathways: A Greenhouse Gas Emissions and Economic Assessment of Current (2020) and Future (2030-2035) Technologies". United States. https://doi.org/10.2172/2228291. https://www.osti.gov/servlets/purl/2228291.
[2] While electric vehicles (EVs) and autonomous vehicles (AVs) are distinct for now, they will eventually converge in their roles, as many EVs are being developed with advanced software to become fully autonomous in the near future.

vrooming each day. Instead of asking how we can continue living the same way with a "green twist," we need to ask: **Why are we so dependent on cars in the first place?**

If we really want to tackle the climate crisis, we must rethink how our cities are designed, not just how cars are powered. We're building sprawling suburbs that trap us into long commutes when we should be investing in compact, walkable, and transit-friendly cities. Many of those daily trips, especially the ones under 2 kilometres, could be done using public transport or, heaven forbid, by walking! Seriously, if your destination is less than a kilometre away, why are we even contemplating hopping into a car? Let's lace up our sneakers instead of relying on automation to do what our legs were designed to handle.

Cutting down the number of car trips and miles driven isn't just a "nice-to-have" — it's critical if we genuinely want to reduce environmental damage. Swapping out combustion engines for batteries won't save us. If we can't shift our mentality from car ownership to embracing public transport, cycling, or walking, we're just going to find ourselves in a climate crisis... but with better sound systems in our robot-taxis.