Internal combustion is our past. Electric is our future.

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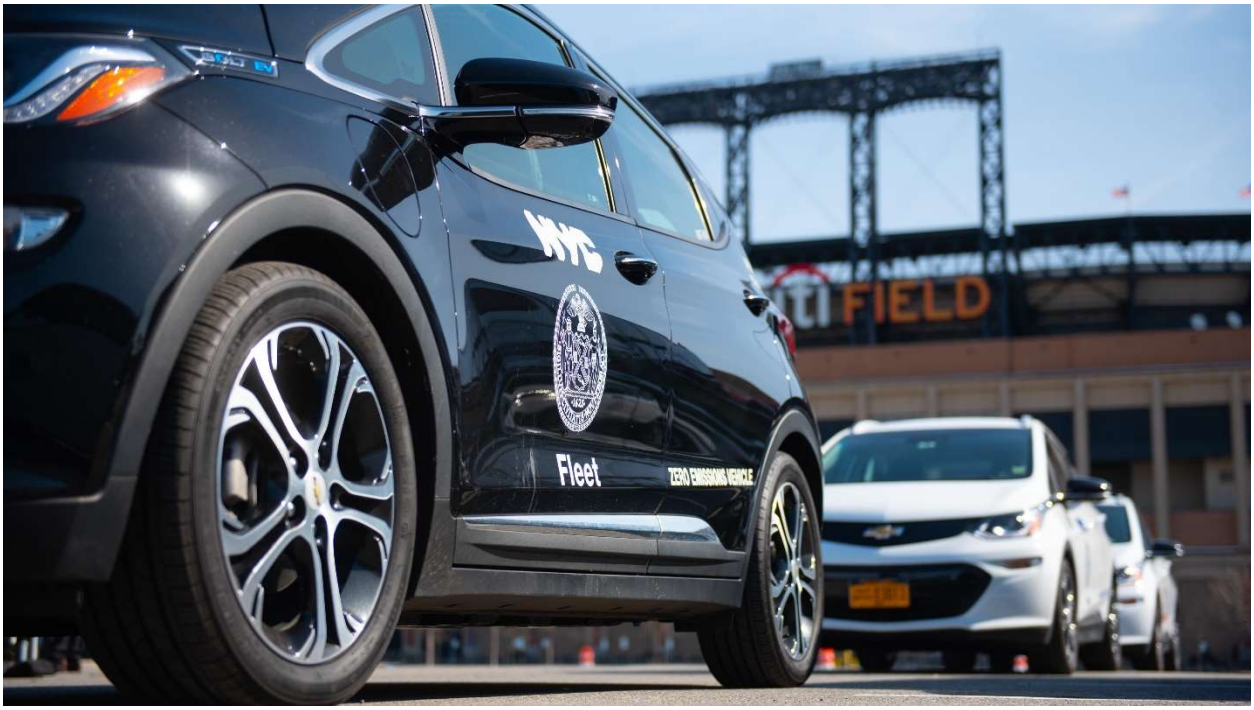

Intake, compression, power, and exhaust. The four basics steps of the internal combustion process. Thanks to this powerful innovation, the modern world as we know it was created. Our trains, cars, trucks, tanks, industry, and machines were all powered through liquid fuels and controlled explosions. Propelled by this technology and the industry it helped support, the United States became the most powerful economic and military force in world history. The internal combustion engine has in the blink of an eye, just 150 years, enabled humanity to reimagine the planet and create modern life. It is one of humanity's most transformative technologies, but now it's time we leave it in the past.

Need we forget, the premise of the combustion engine is controlled explosions. If you invited me to your house and I blew up something on your driveway, you might not want me back. Yet, that is exactly what I am doing when I drive over with my traditional combustion vehicle. And it's not just a couple of explosions. The speed of a vehicle engine is measured in revolutions per minute (RPM). Each revolution requires ignition of fuel. If your car is going 2,000 RPMs, then it's exploding 2,000 times per minute. No wonder our environment is at risk.

We all know about the air pollution gas-powered vehicles cause. The greenhouse gases that are blanketing and heating up our planet pose near-term risks to all human life. We are already feeling the impacts of a changing climate — forest fires, flooding, increasing temperatures, and more powerful storms. If your body temperature keeps going up, you are sick. If you can't get it under control, you pass on. Our planet's temperature is going up and we are all at risk.

Think about how quickly a single virus changed all our lives globally in the last year. Now imagine what climate change and its myriad of impacts will do long-term. The planet and all of the life it sustains hangs in the balance. Life that has evolved over 4.5 billion years has been placed at dire risk due to the consequences of the most recent 150 years.

In addition to the pollution, the noise created by the combustion engine and its level of maintenance make it remarkably inefficient. Going back to my visit to your house, I plan on bringing 10 pizzas for everyone. Would I be less welcome if I threw eight of them in your garbage can as soon as I arrived? Well, the traditional combustion engine wastes eight of every 10 gallons of fuel you place in it. Learn more from the federal government: Where the Energy Goes: Gasoline Vehicles. It's as inefficient as it is polluting.

There is now a viable and available alternative. The electric vehicle industry is exploding as well, but figuratively, not literally. Electric vehicle models are being offered now in every type of vehicle: sedans, SUVs, pick-ups, vans, and trucks. Electric vehicles offer zero emissions at the tailpipe. In fact, there is no tailpipe. They can reduce maintenance costs over 60%, and they are quiet. (*Learn more about that from DCAS: EV maintenance costs in NYC run lower than gas-powered cars*.)

Electricity is of course nothing new. We plug in our TVs, our computers, our lights, and our appliances. Why not our cars? We don't wait for our house lights to rev up to be operational. We just turn them on. When you accelerate in a gas-powered car, it takes a while to rev up to peak acceleration. Electric cars, on the other hand, have what is known as instant torque, allowing them to reach peak acceleration much faster. Electric cars are also much more efficient, using 80% or more of the energy supplied to power the car forward. Last I checked, 80% is a lot better grade than 20%. It means reduced fuel costs too.

Power, efficiency, performance, reliability. Every combustion car commercial makes these claims. They are truer for electric vehicles, and without all the pollution and smell. Yes, battery range is an issue. Battery range is getting better, cheaper, and electric vehicle charging is going up in more and more places. For NYC, we're continuing to make

strides towards a greener tomorrow with the installation of electric vehicle fast chargers throughout the five boroughs.

NYC's fleet already operates over 2,800 plug-in vehicles and over 1,000 charging stations. We plan to bring all 25,000 of our on-road vehicles to electric by 2040. If we can do it in New York, you can do it anywhere.