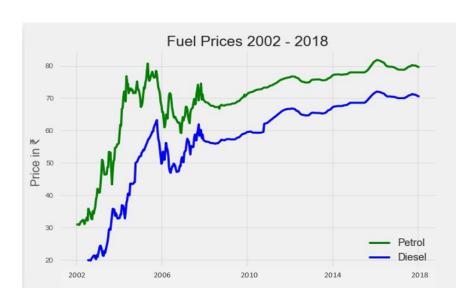
<u>Is Switching Over To An Electric Vehicle Really</u> <u>Worth It ??</u>

With a drive to make INDIA pollution free and plan made by the government to sell only electric cars by 2030 we have made it easy for you to understand variation in cost between an Electric and Petrol/Diesel vehicle with respect to an individual who commutes daily.

First let's see a brief history about the variation in prices of Fuel over past several years in a graphical format.



Source: iloc.com

With the depletion of fuel quantity across globe the cost per unit of fuel is always increasing, but with a motivation to produce massive amount of renewable energy resource, electricity would tend to be much cheaper in future.

Scenario 1: The chart shows the cost of owning a new vehicle by considering the following situation including loan, insurance, maintenance and few other practical considerations.

Car Cost (per annum)	Fuel Cars	Electric cars
Value	Rs 1000000	Rs 800000
Down-Payment	Rs 600000	Rs 500000
Loan	Rs 400000	Rs 300000
Depreciation (10% p.a)	Rs 100000	Rs 80000
Insurance	Rs 15000	Rs 15000
Interest (15% Loan)	Rs 12000	Rs 9000
Maintenance	Rs 5000	Rs 1000
Parking	Rs 3600	Rs 3600
Fuel	Rs 43500	Rs 11500
Cost per km	Rs 5-6	Rs 0.9 – 1.2

Facts:

- Insurance for Electric cars are a bit higher when compared to fuel cars. (Good news!!! Electric cars are cheaper though)
- Electric cars might require battery replacement (under maintenance say Rs 5000 for battery replacement in 5 years)

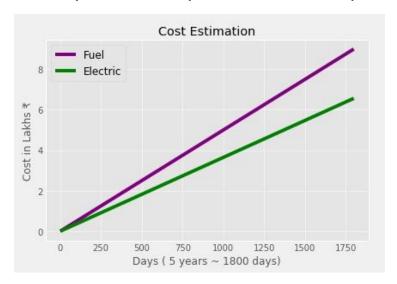
Note:

- Average fuel cost (Petrol and Diesel) considered per liter = 72.5
- Electricity required for charging = 18 units for full charge (1 unit 7Rs)
- Average mileage of Petrol/ Diesel vehicle assumed = 15 kmpl
- Loan is considered for 5 years

Scenario 2: This chart shows per day cost of a daily commuter who travels an average of 25km with respect to Petrol/Diesel and Electric Cars. (Per annum $365 \sim 360$ days)

Per day Cost (360 days p.a)	Fuel Cars	Electric Cars
Fuel Cost	Rs 120	Rs 32
Depreciation	Rs 280	Rs 223
Insurance	Rs 42	Rs 42
Interest	Rs 33	Rs 25
Maintenance	Rs 14	Rs 32
Parking	Rs 10	Rs 10
TOTAL	Rs 499	Rs 364

Scenario 3: By considering a person owning a vehicle for 5 years the following graph depicts the difference in cost between Petrol/Diesel and Electric Cars over a period of 5 years ~ 1800 days.



For a period of 5 years ~ 1800 days:

- Petrol/Diesel Cars = ₹8,98,200
- Electric Cars = ₹ 6,55,200

However, the values may change depending upon rough or smooth use of vehicle by a person and in future the cost difference between Petrol/Diesel and Electric Cars may vary on a greater scale as production of renewable energy is increasing rapidly and there may be raise in fuel prices as they get depleted but with more production of renewable energy the cost of electricity only gets cheaper.

Given the above scenarios, delving deeper into cost-benefit analysis helps one in making smarter decisions.