

Blue Horizons Project

Setting the course for clean energy

Electric Vehicles Technology Presentation



Electric Vehicle Introduction

Electric vehicles are environmentally friendly, powered by electricity instead of by burning fuels like gasoline, which lowers overall CO2 emissions and eliminates pollutants while you drive.

Electric vehicles are now more affordable than ever, with over 40 models in the US market and more than 750,000 sold.



How Does an Electric Vehicle Work?

Electric vehicles typically run on alternating current (AC) electric motors that are powered by batteries, instead of combustion engines fueled by gasoline or diesel. They are recharged by a plug that goes into your wall outlet or one of 30,000 public charging outlets nationwide.

Each charge carries the car 50 to 300 miles, depending on the car.



Benefits of Electric Vehicles

- Electric vehicle charging outlets are very common now in public places with over 30,000 nationwide.
- The cost of powering a vehicle from electricity is much cheaper than gasoline or diesel fuel, on average electricity is half the price of fuel.
- Electric vehicles do not require tune-ups or oil changes and require very little maintenance, which can save owners over \$300 a year.



Electric Vehicles Financial Cost

Prices range from about \$22,000 to \$70,000 for popular electric vehicles in the US market. These are prices after a \$7,200 Federal Tax rebate.

Annual average cost of fueling a petroleum vehicle is about 2.3 times higher than the cost of charging an electric vehicle. Electric vehicles have very low maintenance costs and do not require oil changes or tunes ups.



Electric Vehicles Help the Environment

Our Community in Asheville and Buncombe County is committed to creating a cleaner, smarter and more affordable energy future.

Driving an electric vehicle means lowering CO2 emissions, reducing dependence on fossil fuels and giving focus to using more clean, renewable energy to power motor vehicles all over the planet.



Want to Know More?

Frequently Asked Questions

1. Where are there charging stations in Buncombe County?

EV charging stations are located in several public areas in Buncombe County. The website below offers a map of locations.

https://chargehub.com/en/countries/united-states/north-carolina/asheville.html?city_id=344

2. Can you describe the federal tax credit for Electric Vehicles?

Depending on make and model of EV, you can receive a Federal tax credit of up to \$7,500. More information in the link below.

<https://www.energysage.com/electric-vehicles/costs-and-benefits-evs/ev-tax-credits/>

Want to Know More?

3. Are any other financial incentives offered in North Carolina for purchasing electric vehicles?

Nissan offers a \$3,000 rebate in North Carolina for the 2018 model Leaf. This is currently the only financial incentive offered at state scale.

<http://www.pluginnc.com/resource/nissan-10000-rebate-north-carolina-residents/>

4. What's the difference between a hybrid and purely electric vehicle?

Hybrid vehicles run on both gas and electric, some of which you do not need to plug in to charge the batteries. EV's run completely on electricity from their batteries which have to be plugged in at home or at a public charging station.