## The Gasoline-Powered Automobile Is Obsolete

Electric Drivetrains Simply Make the Most Sense and Are Now More Practical and Affordable for Cars & Trucks

#### Volkswagen said as much back in 2007:

(from the Spring/Summer 2007 issues of "VW Driver")

clean diesel, which they also drove. uel 'Your prototypes feel like production cars,' fuel efficienc the journalists said." the entire veh Actually, Volkswagen expects that all cars "Clean diesel eventually will be electric. That's the Volkswagen bro current point of view, anyway. For starters, we lead the mar however, clean diesel is the next-best What else would alternative, because it is simply the best owners, expect a fuel available and by definition complies to do but to

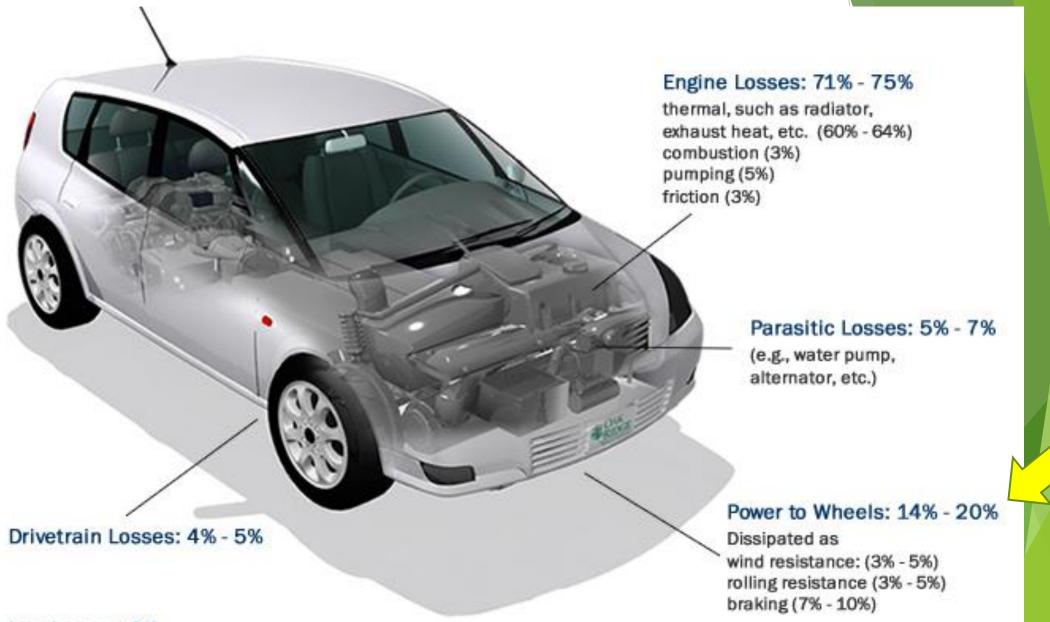
What's the Carbon Footprint of EV's vs. Gas-Powered Cars?

Aren't Electric Cars Just Burning Coal Instead of Gasoline?

# Less than 20% of the Power in Gasoline Goes to Propel the Vehicle.

#### Electric Cars are 90% efficient

90% of the energy used goes to powering the wheels



Idle Losses: 6%

In this figure, they are accounted for as part of the engine and parasitic losses.

## Slowing Down or Going Downhill, It Gets Worse...

Only Electric Vehicles Allow You to Recapture the Energy Used to Gain Speed or Climb Hills.

#### <u>Case Study:</u> Regenerative Braking in My Tesla

8.9 Miles from Genesee Exit to I-70 to my office in Golden.

My Tesla generated 1.5 kWh of electricity, while the cars around me burned ~1 quart of gas.

Electricity is the *only* energy that you and I can create at home!

#### Today's Sustainability Model:

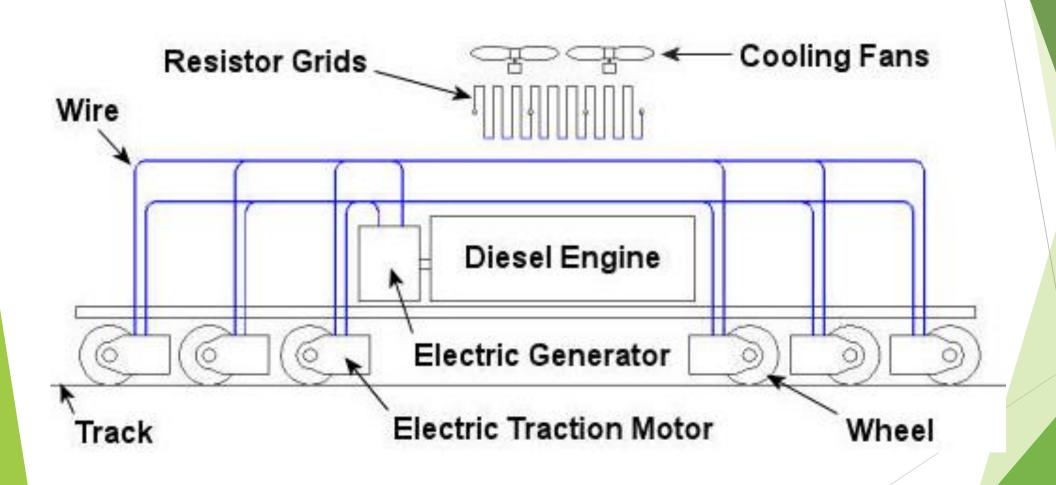
Put enough solar panels on your home to power your home <u>and</u> the car in your garage!

#### How Powerful Can Electric Motors Be?

#### Here's a powerful EV...



#### Here's How Diesel Electric Locomotives Work...



#### Do You Like Performance?

EV's instant torque has become legendary.

#### EV's Aren't New...



1915 Detroit Electric Car

#### What's New About EV's? The Batteries.



### Let's Talk Affordability...

#### Electric Cars Are Already Affordable Because of Federal/State Tax Credits

\$7,500 Federal tax credit \$5,000 Colorado rebate at purchase

And They're Getting More Affordable Every Year

- 2018 Nissan Leaf \$30,877
- 2018 Chevrolet Volt \$33,220
- 2017 Chevrolet Bolt \$36,620
- 2018 Ford Focus Electric \$31,075
- 2018 Kia Soul EV Wagon \$33,145
- 2017 Mercedes-Benz B250e \$46,075
- 2018 BMW i3 \$48,645
- 2017 Fiat 500e \$34,085
- 2017 <u>Mitsubishi i-MiEV</u> \$24,390
- 2018 Tesla Model S 75D \$74,500
- 2018 Tesla Model X 75D \$79,500
- 2018 Tesla Model 3 \$35,000

#### Note:

These Tax Credits Are for Early Adopters - Be One!

## EV's Cost Less to Operate

#### Fuel Cost per Mile

Electric Cars -- 4 cents (or free)

Gasoline Cars -- 10 to 30 cents

#### **Don't Forget Maintenance Costs!**

Electric Cars -- negligible

Gasoline Cars -- 10 cents/mile (est.)

Tesla cars need less service than ICE cars. A standard ICE automobile has more than 2,000 moving parts. Tesla cars have 18 moving parts!

--Baron Funds' Sept. 30, 2014 Newsletter

#### 10 Most Common Automotive Repairs:

- 1. Brake Work
- 2. Oil Changes
- 3. Coolant System
- 4. Tires
- 5. Ignition System
- 6. Electrical System
- 7. Fuel System
- 8. Transmission
- 9. Exhaust System
- 10. Air Conditioning System

Source: Autos.com

Not mentioned: Timing Belt -- Do you have a "favorite"?

#### The Three Most Common Gas/Diesel Engine Problems:

#### 1. Engine Won't Start

- 1. 12V battery failure
- 2. Wiring or relay failure
- 3. Fuel pump failure
- 4. Dirty fuel filter

#### 2. Check Engine Light

- 1. Emission problem/oxygen sensor
- 2. Loose or missing gas cap
- 3. Spark plugs/distributor cap/electronic ignition
- 4. Fuel quality issues

#### 3. Overheating

- 1. Faulty thermostat
- 2. Kinked or broker radiator hose
- 3. Low coolant level or coolant fan failure
- 4. Defective radiator cap
- 5. Dirty air filter
- 6. Hot weather!



#### It Costs Less to <u>Build</u> an Electric Car

According to Der Spiegel, the components related to internal combustion engines represent nearly <u>half the cost</u> of building a conventional car. For a battery electric car, replace those costs with battery, electric motors and little else.

## Here's what the 350-HP Tesla Motor Looks Like...

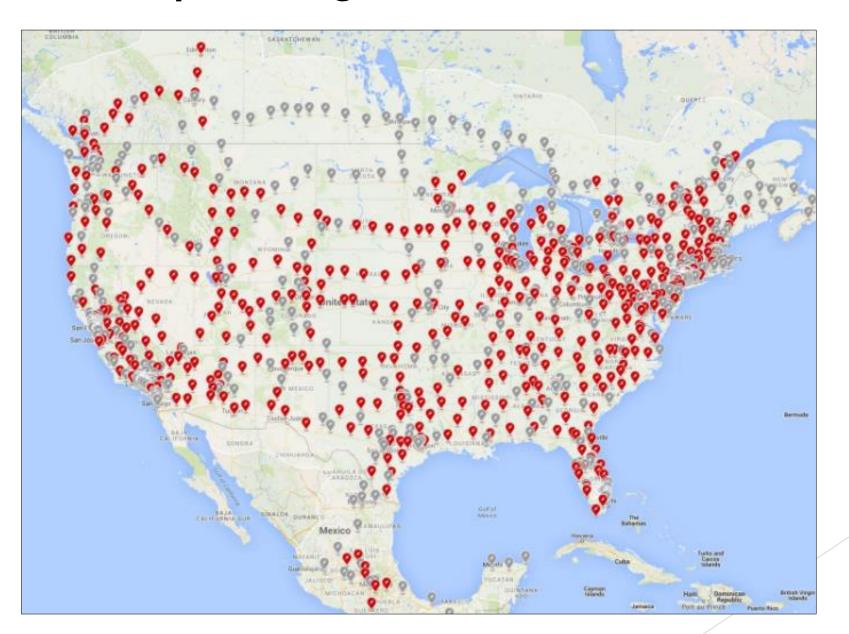


## And here's how you charge a Tesla at home....



## Both Motor & Battery Come With an 8-Year, Unlimited Mileage Warranty

#### Tesla's Supercharger Network



## Let's Talk Safety....



#### Many Crash Victims Are Killed by Fire



Would You Rather Be in the Red Tesla or the Black Mercedes?

## Carbon Monoxide? Not With an Electric Vehicle

### My Advice to Americans:

Don't buy a new gas-powered car. If the type of vehicle you want is not available today, it will be within 5-10 years at most.

# Can't Afford a New EV?

Used EVs are a super deal & a smart buy!

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2015 Nissan Leaf - $11,569 (Boulder Nissan)
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- 2015 Chevy Volt \$15,061 (Emich Chevrolet)
- 2017 Chevy Bolt \$27,727 (Cargurus.com)
- 2013 Tesla Model S \$39,494 (Trucar.com)

Other Countries Are Further Along in the Manufacture and Adoption of Electric Vehicles



www.facebook.com/vehiculos.electricos.7

vehiculoselectricos@yahoo.es







### This 100 Percent Electric Eighteen-Wheeler Just Hit The Road In Germany

BY ARI PHILLIPS > JUL 9, 2015 12:49PM



### Coming in 2020 - Nikola One semi

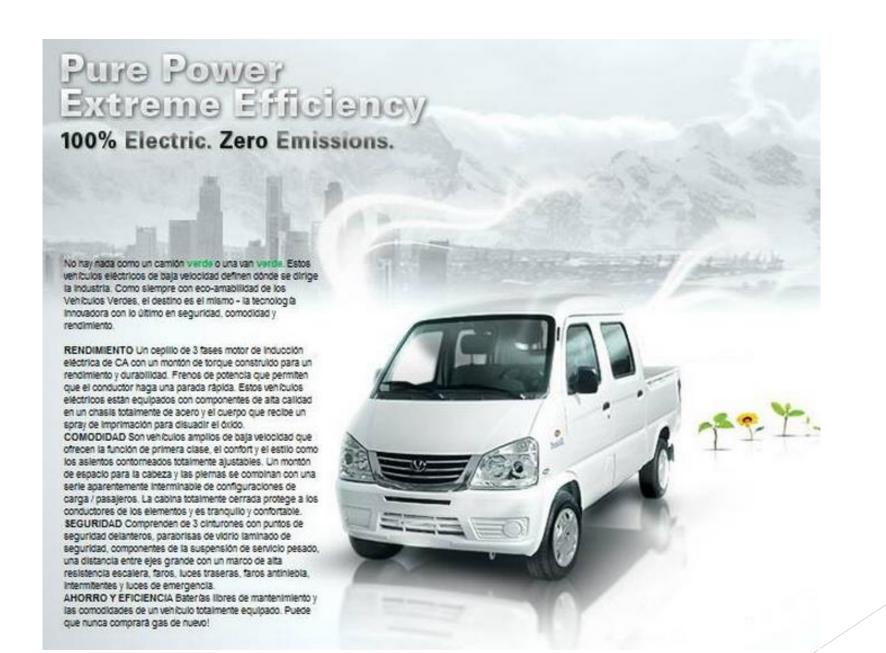


320 kWh Lithium Ion battery with Hydrogen Fuel Cell to generate electricity (for range extending)

1,000 hp delivered by 6 electric motors and 2-speed transmission 800 to 1,200 mile range

Can also charge battery by plugging in Made in America; factory site not selected yet Company will begin building network of hydrogen charging stations in 2018; truck delivery expected to begin in 2020









## Tesla Makes a Terrific Police Car



#### Also a Great Taxicab...



Tesla Model S automobiles are used as taxis in Vienna.

There are 167 Tesla Model S taxicabs in service at the Amsterdam airport.



# What Are You Waiting For?

#### **Electrics Cars Are:**

- \* Powerful & Safe
- \* Cheap to Operate
- \* Even Cheaper to Maintain
- \* Drive Train Warranteed for up to 8 Years
- \* Can Be Fueled for Free at Home or Work and on Long Trips
- \* Will Have Great Resale Value