Disclaimer: The views expressed are those of Paul Gipe and are not necessarily those of the sponsor.

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Paul Gipe, wind-works.org
Stick it to Putin — drive electric now

Paul Gipe, wind-works.org
For Peace’s Sake Get Off Oil

Paul Gipe, wind-works.org
When you drive a car, you drive with Putin!

Ride your bicycle today!

or EV

Paul Gipe, wind-works.org
Don’t Fund Putin’s War Machine

• 40%-60% of Russian State Revenues Come from the Sale of Fossil Fuels

Paul Gipe, wind-works.org
Don’t Fund Saudi Autocrats Either

• Every Gallon Supports Oil Oligarchs
  Russian, Saudi, & American too

Paul Gipe, wind-works.org
Remember: Oil—Not a Pretty Picture

Paul Gipe, wind-works.org
2014
Remember: We’re Offsetting Oil

Kern County: California’s Oil Capital
1% of World Production

Paul Gipe, wind-works.org
For Climate’s Sake Get Off Oil

- IPCC Report—Now or Never

Paul Gipe, wind-works.org
Drive Electric Now

• It’s the Right Thing to Do
• Practice What We Preach
• Ditch the Prius & SUV
Drive Electric Now and Fuel with Freedom Wind

Paul Gipe, wind-works.org
... and Liberty Solar

Hinesburg, Vermont

Paul Gipe, wind-works.org
Must Increase Deployment Rate

• Growth—Good but not Enough
• Must Accelerate Growth
• US is Lagging--Again
• What Can be Done

Early Adopters—Move Now

Paul Gipe, wind-works.org

Wind Wolves Preserve
World EV Markets 2021

% Market Share

USA: 4%
China: 9%
Europe: 14%

Paul Gipe, wind-works.org
National EV Markets 2021

% Market Share

California: 10%
France: 12%
Switzerland: 13%
Germany: 14%
Great Britain: 18%
Sweden: 26%
Norway: 76% (1st Qtr 2022: 82%)

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Tesla

- **3 Existing Plants**
  - Fremont, Reno (Batteries), Shanghai
- **2 New Plants Now Online**
  - Berlin, Austin
- **940,000 EVs 2021 Worldwide**
- **>1 Million EVs 2022**
- **~2 Million EVs 2023**

Paul Gipe, wind-works.org
Legacy Manufacturers

- **VW**—Biggest Worldwide Commitment
  - $1-$2 Billion Chattanooga Plant
- **Ford**
  - Mexico: Mustang Mach E, F150
  - $6 Billion Blue Oval City, Kentucky (Non-Union)
- **GM**
  - $7 Billion Michigan (UAW)
  - $2 Billion Tennessee (Non-Union)
- **Stellantis**
  - $4 Billion Windsor Ontario

Paul Gipe, wind-works.org
New Kids on the Block

- Rivian Pickups
  Amazon Backed
- Lucid
  High-End Luxury 500 mile range
- Trucks & Buses Oh My
  BYD Lancaster, California

Paul Gipe, wind-works.org
Range Anxiety
Not Just for Drivers of EVs
Pandemic Peregrinations
or
How We Escaped Lockdown
by
Nancy Nies & Paul Gipe

Carrizo Plain National Monument

Paul Gipe, wind-works.org
Our Response to Lockdown

• ~65 Excursions
• Weekly Day Trips
• Most < 100 miles
• Some ~ 2 hrs one-way
• Max ~4 hrs one-way
• All in an EV!

Paul Gipe, wind-works.org
Find Hope & Healing

- Inspiration
- Renewal

Dome Rock, SNF

Paul Gipe, wind-works.org
What to Do?

• Drive
• Walk
• Hike
• Climb

Paul Gipe, wind-works.org
What to Take

• “Ready-to-Go” kit
  Packs, poles, snacks, hats, coats

• Radios
  If you’re hiking in a group

• Maps
  Road & Topo Maps
  Digital Topos

Paul Gipe, wind-works.org
Take the Road Less Traveled

Swede’s Cut
Old Ridge Route

Paul Gipe, wind-works.org
Find Joy on a Mountaintop

Bald Mountain

Paul Gipe, wind-works.org
Covid Escape: Our Final (We Thought) Pandemic Excursion
1,700 miles in an EV

Breakwater Crescent City, Calif.

Paul Gipe, wind-works.org
Covid Escape: Our Final (We Thought) Pandemic Excursion—1,700 miles in an EV

Paul Gipe, wind-works.org
Destinations & GPS Links

EV Articles by Paul Gipe

Pandemic Peregrinations in an EV

Since the advent of the first Covid-19 lockdown in California in mid-March 2020, Nancy and I have taken weekly day-trips to explore our region. Fully cognizant of the need to socially distance ourselves from others during the pandemic, we’ve walked, hiked, climbed and driven through remote areas within 100 miles of Bakersfield, California. In most cases we never met another person.

We’ve sometimes ventured further afield and driven as far as 175 miles from home, but we always returned by evening.

We made this a bit more challenging and even more fun by doing all of this in an EV. Of the nearly fifty trips we’ve taken, we’ve had to occasionally charge along the way for a few trips that exceeded the roundtrip range of our Chevy Bolt. The network of DC fast-charging stations has expanded greatly since we first started driving electric seven years
• Kelso Valley & PCT: Take a jaunt on the PCT from the drainage divide between Kelso Valley and Jawbone Canyon. [https://goo.gl/maps/S7SysNRCLQwzwty38](https://goo.gl/maps/S7SysNRCLQwzwty38)
• Cameron Ridge PCT Tehachapi Segment: This is a six-mile hike from Cameron Canyon trail head at the other end of Cameron Canyon and follows Cameron Ridge. This is the route of the Sierra Club’s annual windmill-wildflower hike. [https://goo.gl/maps/mYkVUxnw6Rfn4rgi6](https://goo.gl/maps/mYkVUxnw6Rfn4rgi6)
• Sherman Peak Trail: [https://goo.gl/maps/Yt7LEKEyp9jKBaey5](https://goo.gl/maps/Yt7LEKEyp9jKBaey5)
• Lehigh Trail Tehachapi: The area near the Monolith cement plant is laced with mountain bike trails. Hikers are permitted. Just keep an eye out for the cyclists. A map is available on line. [https://goo.gl/maps/PrkFgG29JdUyouP38](https://goo.gl/maps/PrkFgG29JdUyouP38)
• Chimney Creek Road: This is a graded Forest Service road from Hwy 178 to Nine Mile Canyon Road. [https://goo.gl/maps/CgmKCmyJKKcdjmU47](https://goo.gl/maps/CgmKCmyJKKcdjmU47)
Frequently Asked Questions about Electric Vehicles (EVs)

My friends here in Bakersfield and elsewhere have asked me many questions about driving electric. There are many web sites that explain what EVs are, how to use them, how to evaluate them, and how to get the most out of them. Nevertheless, I've chosen to include some of the questions I've been asked. There are many more. I've also written extensively about our use of EVs and our adventures driving EVs. I've pulled those articles out and put them under one title: **EV Articles by Paul Gipe**. Also see **Electric Vehicles** and **EV Trip Reports** for more information.
No Time to Waffle
No Time for Half-Measures
No Time to Lose

Paul Gipe, wind-works.org
No Plug--No Deal

Paul Scott, *Who Killed the Electric Car*
EV CHARGING ONLY