

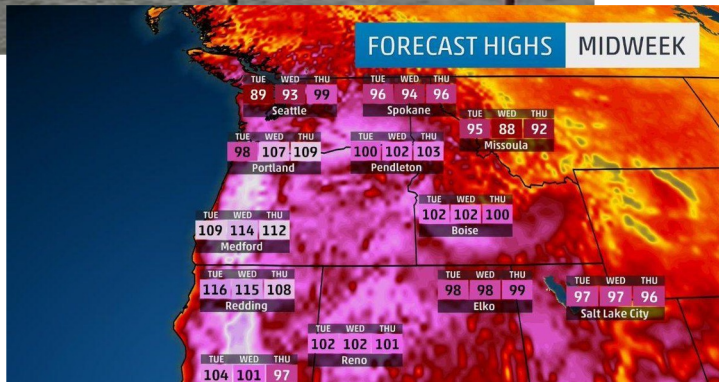
WIRED UP, READY TO GO

Electrifying Everything with CLEAN
and Renewable Energy





Seen any Extreme Weather Lately?





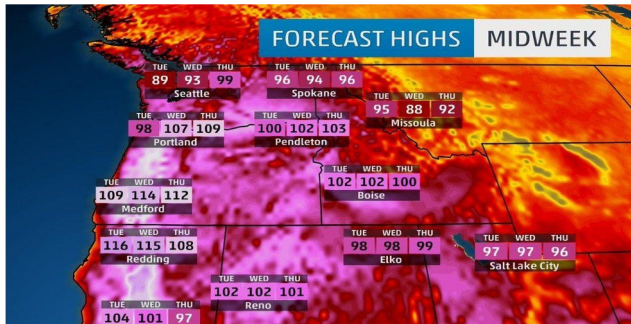
Reasons to Electrify Everything

Which one is most important to you?

Climate Pollution

Your Health

Your Budget



A typical all-electric home in Maryland will save **\$510** on utilities each year*

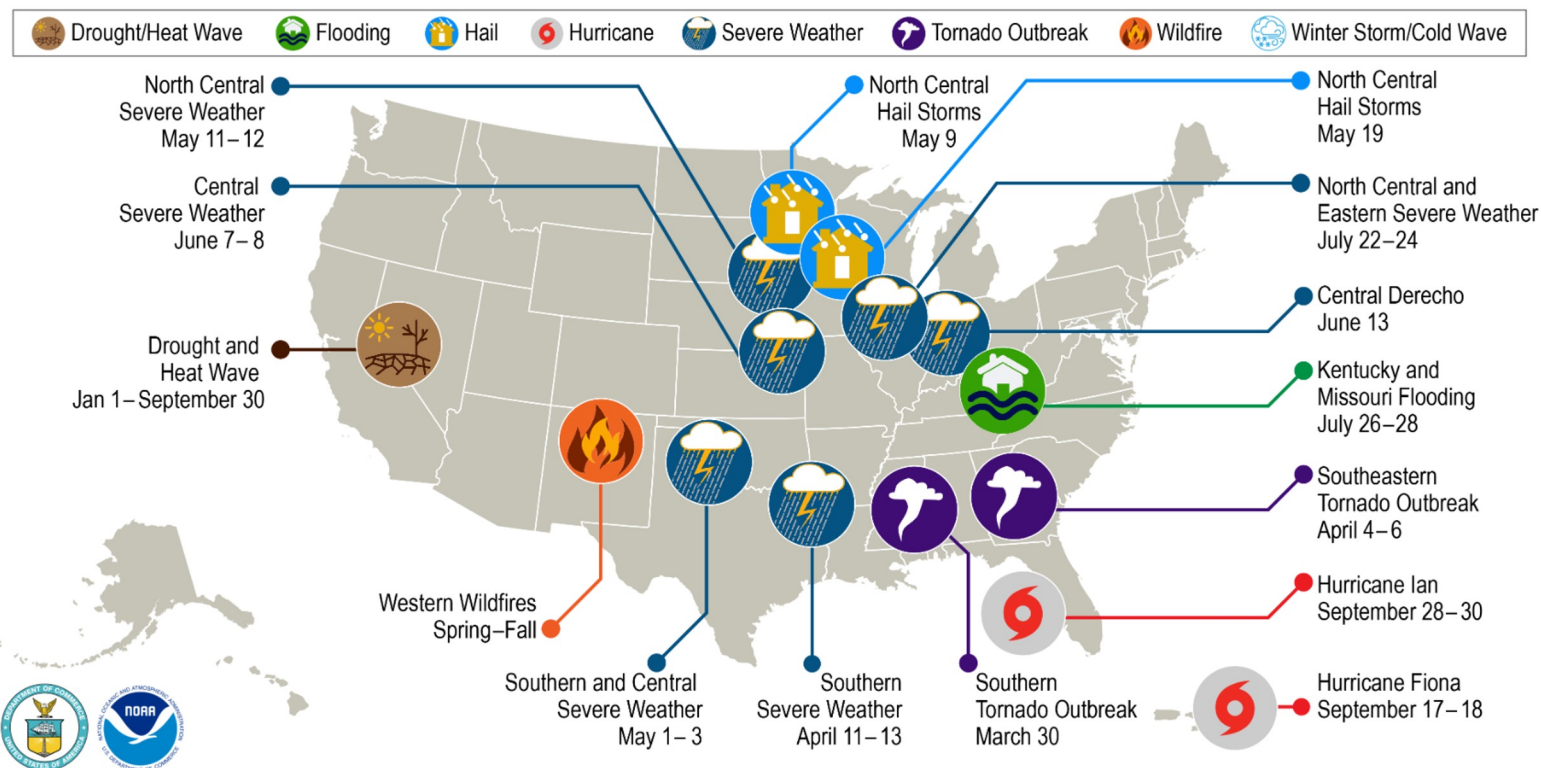
**RMI 2023*



Why electrify now?

- The products of combustion, of burning things for energy, are killing our life support systems, our food, water, air
- Our climate, our economy, and our health suffer
- Unprecedented financial support to electrify!!

U.S. 2022 Billion-Dollar Weather and Climate Disasters

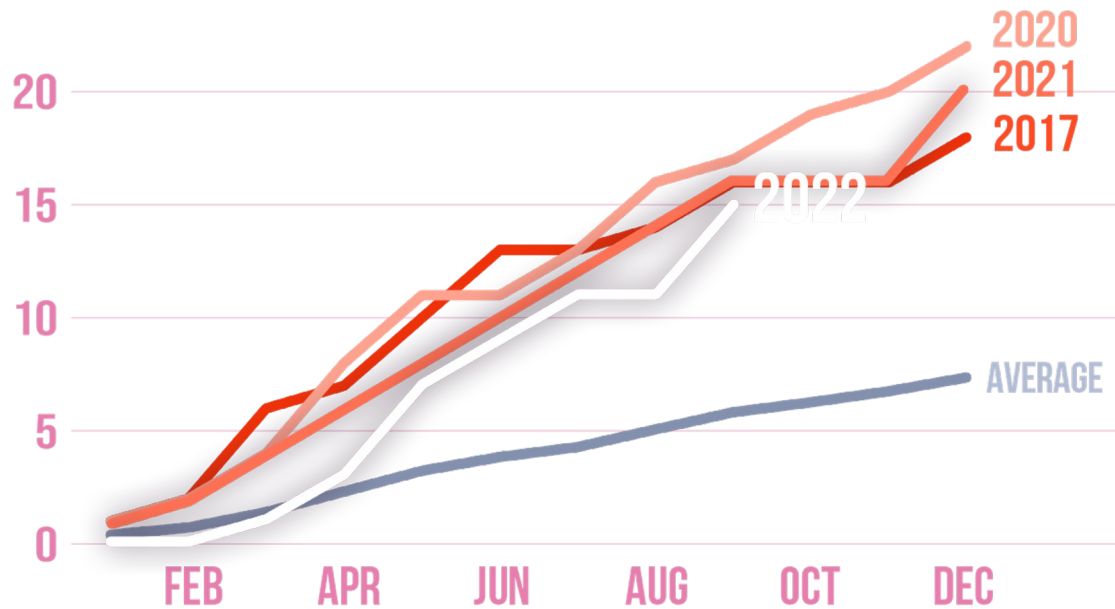


This map denotes the approximate location for each of the 15 separate billion-dollar weather and climate disasters that impacted the United States January – September of 2022.

A map of the United States plotted with 15 weather and climate disasters each costing \$1 billion or more that occurred between January and September 30, 2022. (NOAA)

Increasing rate of Billion Dollar Disasters

- In the 1980's billion-dollar disasters occurred on average every 82 days.
- Between 2017 and 2021 the average was just 18 days.
- So far in 2023, as of November 9th, we are at just under 21 days.



Cumulative billion-dollar disaster frequency, 1980-2022 average.
Source: NOAA/NCEI



Action NOW saves money!

“It is now cheaper to save the earth than to ruin it.” Hal Harvey, CEO of Energy Innovation

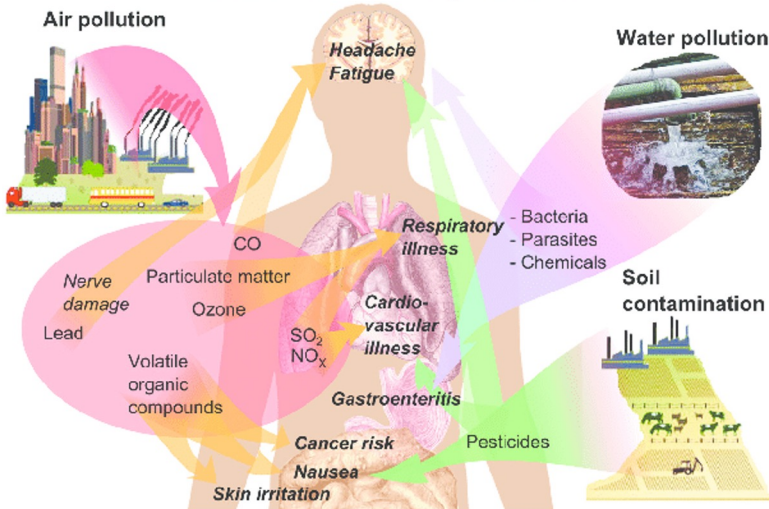
- According to Axios, the US is experiencing a \$1B every 18 days! In 2023, the US had spent \$157B on weather-related disasters by September
- House Budget Committee estimates we'll spend an extra \$500 billion of tax dollars by 2030 on repairs if business continues as usual
- The global community will save \$26 TRILLION if we change to sustainable practices by 2030



Fuel burning appliances pollute outdoor air

Appliance Pollutant	Also Found In	Linked to Cancer	Linked to Cardiovascular Disease	Linked to Respiratory Illness
Carbon Monoxide	Car Exhaust		✓	
Nitrogen Dioxide	Power Plant Emissions	✓	✓	✓
Ozone	Smog			✓
Particulate matter	Wildfire smoke	✓	✓	✓
Benzene	Cigarette smoke	✓		
Formaldehyde	Pesticides	✓		✓

Health effects of pollution





Health Impacts of Fossil Fuels in Homes

- Cooking with gas pollutes our homes
- Children living in a home with a gas stove are 42% more likely to experience asthma symptoms
- Outdoor air pollution costs Maryland \$7 Billion in health impacts every year
- Electrifying buildings advances health equity

Electrification Will Lower Healthcare Costs

- In a 2022 report, the American Lung Association estimated \$1.2 trillion dollars in savings from electrifying transportation.
- Additional massive savings are possible with the electrification of buildings.

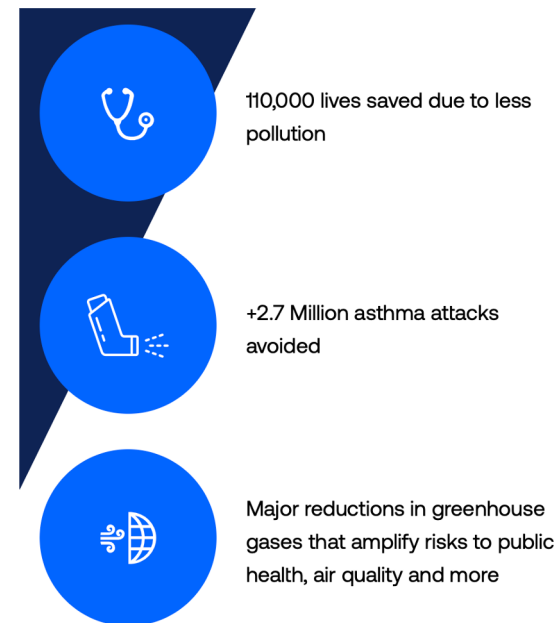
What Are the Benefits?

Transitioning to zero-emission transportation and electricity will greatly reduce pollutants that harm health today and threaten a healthier future.

By 2050

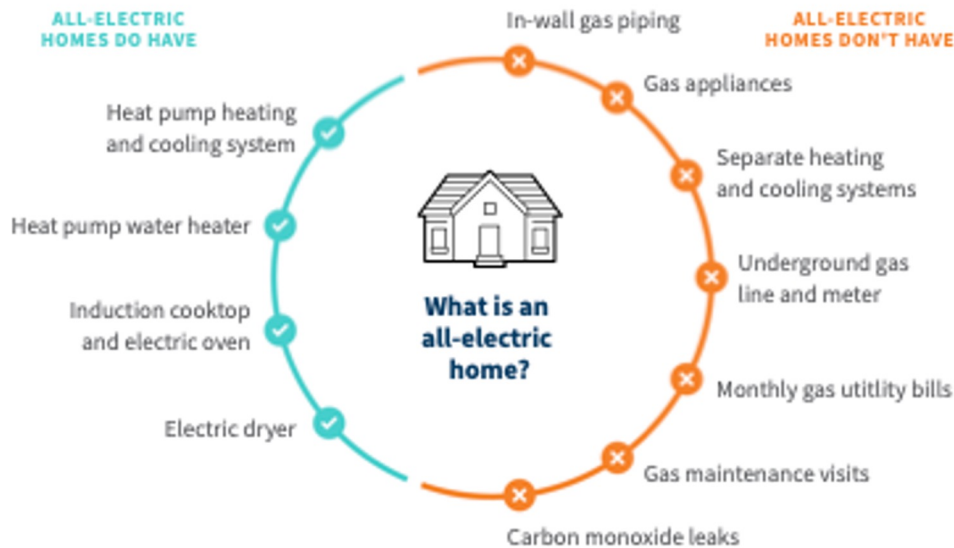
\$1.2
TRILLION

in public health benefits



All-Electric Construction: A Good Deal for Maryland

- Simpler construction saves money.
- All-Electric homes reduce utility bills.
- Adding solar just increases the lifetime cost benefits.



A typical all-electric home in Maryland will save
\$510
on utilities each year.



By 2030, gas prices are expected to increase as much as
130%⁵



We have to come to our own rescue

- There are no magic bullets
- Worldwide, governments subsidize fossil fuels with \$11 million every day (IMF)
- It's hard to compete with big corporate lobbyists!

BUT

- We have a solution NOW - we can ELECTRIFY!!
- We can decide with our wallets AND our voices and our votes

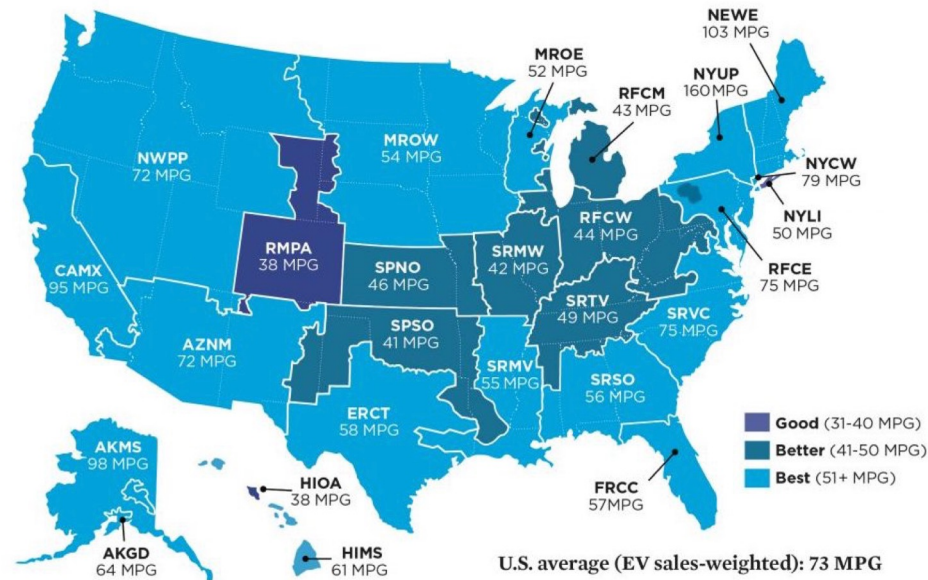


“Electrify Everything” means...
switch to electricity from a clean, renewable power
source



Our Electrical Grid is Getting Cleaner

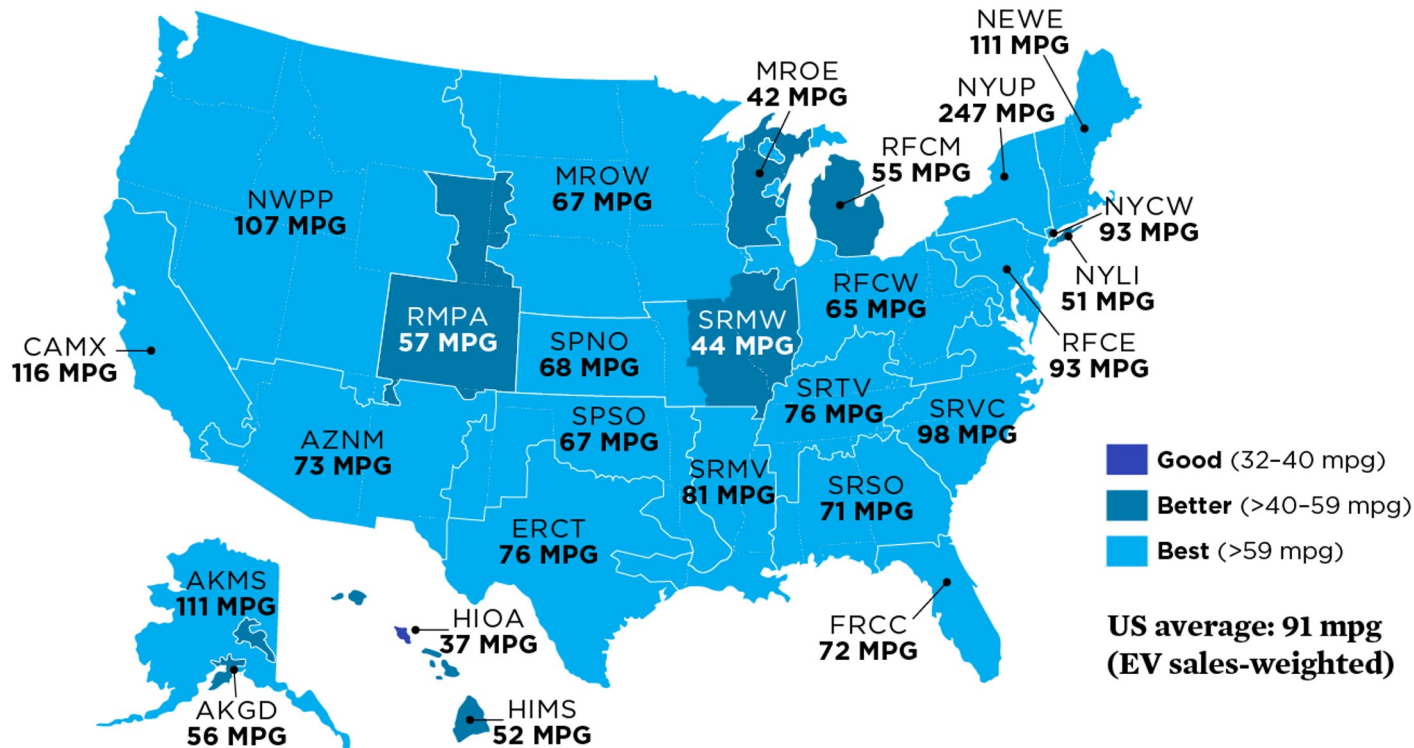
- MPG needed for a gasoline car to be as clean as an EV charged from the grid in 2014. Source: Union of Concerned Scientists
- Note that the map does not include the behind the meter solar that is even cleaner than the grid.



Note: The MPG (miles per gallon) value listed for each region is the combined city/highway fuel economy rating of a gasoline vehicle that would have global warming emissions equivalent to driving an EV. Regional global warming emissions ratings are based on 2014 power plant data in the EPA's eGRID 2014 database (the most recent version). Comparisons include gasoline and electricity fuel production emissions. The 73 MPG U.S. average is a sales-weighted average based on where EVs were sold in 2016.

Our Electrical Grid is Getting Cleaner

- Updated 2020 map shows major improvements
- Everything running off the grid is cleaner than it was when it was purchased.



All electric construction is achievable

- **# 1 recommendation** of the bi-partisan Maryland Commission on Climate Change is to adopt a code that ensures that new buildings meet all water and space heating demand **without the use of fossil fuels.**
 - **Cost effective:** According to an MDE study and Energy + Environmental Economics (E3) study Constructing single-family, all-electric homes cost less to construct than new mixed-fuel homes and constructing multifamily buildings, all-electric costs about the same to construct as mixed-fuel buildings.
-



What's in YOUR house?

Take an inventory - How do you.....

- Heat and cool your home?
- Heat your water?
- Dry your clothes?
- Mow your lawn?
- Cook? Recreate?

Plan to [Electrify Everything in Your Home](#)



First, Conserve

- [Energy Audits in Maryland](#)
- [Maryland EmPOWER Program](#)
- [Maryland Low Income Energy Efficiency Program](#)



Purchase clean, renewable electricity

Options:

- Community Solar
- Solar Co-ops
- Third party installation on your property
- Install and own your own solar panels



Our tools to RAPIDLY electrify

- Clean, Renewable Sources - fed. tax credit of 30% of cost to install - state credit as well
 - Solar
 - Geothermal
- Financial Incentives
 - [Federal Residential Electrification Incentives](#)
 - [State Residential Electrification Incentives](#)
 - [Local](#)
 - [How to Guide](#)
- Our Voices - spread the word, advocate for more
- Our Wallets - use our purchasing power to change the market!



SAVE sooner than you think!

Solar panels - cost \$15,000 to install on a 2100 sq ft house

- \$3,900 federal tax rebate at 26% (2018)
- \$1,000 state rebate

Total upfront cost: \$10,100

Lifecycle savings -

- \$140 per month (savings on electricity)
- +\$360 per year in RECs*

By 8th year, system pays for itself

By 9th year, savings are \$2000+ annually, PLUS an additional \$2500 savings per year by purchasing an EV!

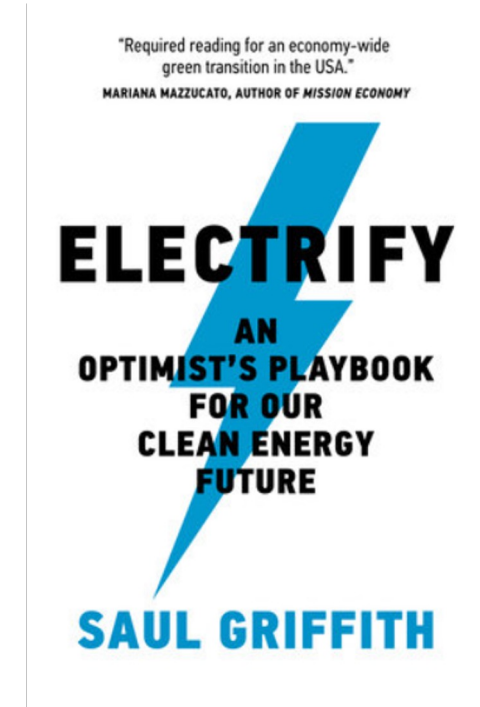


Take Action Today!

- Make your next car an EV or plug-in hybrid
- Replace equipment as it ages out (lawn mower, HVAC, water heater, etc.) with an all-electric version and SAVE!
- Make a plan for electrifying your home. Don't wait until something fails and you need an emergency replacement.
- Visit rewiringamerica.org

The movement is electrifying the country

- Ithaca NY has committed to all-electric buildings, new and old, by 2030, and is working with a private firm to implement the mandate.
- Los Angeles just voted to require all-electric new buildings after January 1.
- Washington state will require all-electric space and water heating in new commercial and multifamily construction.
- Denver passed new appliance standards strongly promoting electrification.
- The DC Council will vote soon to require all new buildings to be net-zero energy with no gas after 2026.



Building the movement



Collective action is more impactful than what you can do as an individual.

- Petition
- Educate
- Advocate

“Gas companies connect at least one new house to gas every minute.” American Gas Association
