



July 27, 2023

Received as a forward? [Subscribe here](#)

By Marcy Franck

## Unlike people who live for warm weather and coolers filled with cold drinks and stray sand, I wither in the summer months.

"The heat drags me into a wretchedly damp ennui," I tried explaining to the guy sweating next to me at the bus stop. "But the crisp air at the end of September swooshes straight into my soul like [Gandalf riding a giant eagle](#) coming to save the hobbits." He blinked back at me as if I had seven heads, all of them speaking gibberish.

I know only a few others who feel similarly, and we cling together in spirit, from a sweaty distance, to prevent chafing. But locked as we are in a worldwide heatwave, the weather feels almost sinister.

I'm not alone in fearing for our future as temperatures surpass what a human body can tolerate in many areas of our globe. [I spoke with CNN this week](#) and the host said that she wasn't able to sleep for a week after she read a book called *The Heat Will Kill You First*. "Well, duh! What did you think would happen after reading a book with that title?" is what I wanted to say, but didn't, because I am a professional woman of poise and substance. Instead, we talked about a few things to keep in perspective:

First, it's not only climate change driving this heat, it's also the onset of El Niño, a weather pattern that temporarily increases temperatures. Second, "It's not too late," said Alaina Wood, one of our [Climate Creators to Watch](#). "Scientists and activists are not giving up, we're just fighting harder." [Her video](#) is a great explainer for what's happening and what we can do.

Third, "We're in the midst of an unstoppable transformation of how we power everything," said podcaster Assaad Razzouk in [a thread](#) that unpacks a new [RMI report](#) on the exponential growth of renewables worldwide. See, for example, the solar power in Texas that [prevented blackouts](#) during the heatwave.

In fact, as we near the [one-year anniversary](#) of the [Inflation Reduction Act](#) (IRA)—America's historic investment in climate action—green technology is advancing so quickly that it's [consistently outpacing](#) official projections. We're in the thick of summer travel season, so let's look at how investments in transportation are flying us—like Gandalf on his eagle—straight into our clean energy future.

---

[Read past issues](#) [View in browser](#) [Donate](#)

## Planes

### ***For when you can't hail an eagle.***

Aviation is the [third-largest source](#) of carbon pollution in transportation, and one of the most difficult to decarbonize. World leaders agreed to [radically reduce emissions](#) by 2050, and



the U.S. committed to using zero carbon emissions.

**The future of clean aviation will include** sustainable aviation fuels (SAF), battery-powered aircraft for short trips, electrified ground equipment, energy efficiency measures, and carbon offsets. Efforts to bring this vision to life are already underway.

**United took the first 100% SAF-fueled passenger flight in 2021**, the first **all-electric plane** took flight in 2022, and in early 2023 NY's JFK Airport broke ground on a new terminal that will be **powered by a rooftop solar micro-grid**.

## Trains

***The best thing about a train is that it's not a plane.***



**A passenger going from NYC to Washington DC on a plane** generates 174 lbs of CO<sub>2</sub>, while a passenger on a train generates 7 lbs. That's one reason **Europe** is bolstering their rail network with high-speed routes and cutting flights that have a fast rail alternative.

**Last year, Amtrak announced a plan to go net-zero by 2045** by transitioning to green fuels and using only carbon-free electricity in its buildings by 2030. The Bipartisan Infrastructure Law **increased funding by 500%** to improve passenger and freight rail.

**California adopted a rule to reduce diesel exhaust from trains** which will cut emissions on par with removing all heavy duty trucks in the state by 2030. It will also improve health—diesel emissions are responsible for 70% of Californians' risk of cancer from air pollution.

## Automobiles

***There are 26 million EVs on the world's roads. Are you hankering to make it 26 million and one? Some things to consider:***



**The price of EVs could match gasoline cars this year.** In fact, 9 in 10 people **save money** with an EV, and most EV buyers don't **switch back** to gas. **This handy guide** can help you decide to buy now or wait, and so could this list of **models eligible** for up to \$7500 in tax credits. Or you could take advantage of the IRA's **leasing credit**.

**Car batteries: Not just for driving anymore.** An EV can store about **3-days' worth** of electricity to power an average American home. Some EVs can do this fresh off the assembly line, while many **automakers say** they'll enable more cars soon. Don't want to wait? You could **MacGyver your own EV** in a pinch.

**Some argue that EVs will tax our fragile energy grid, but science says otherwise.** EVs can store green energy and sell it back to the grid to prevent blackouts. By 2030, only one third of EV owners would need to **opt in** to meet the world's storage demands.

**Range anxiety: Alexa** will soon steer you to the nearest charging station, which by 2030 could be at one of many thousands of **Walmart stores**, or at one of the **500k public chargers** soon to be found every 50 miles along U.S. highways, or in one of the many cities **racing to add** new charging options. Here are the **10 most EV-friendly cities**.



Here's what we've been up to



**We're hosting 85 high school students at our third annual [Youth Summit on Climate, Health, and Equity](#) with Putney Pre-College this month. After a week of skills training and experiential learning, students will return home with concrete climate action plans to implement in their own communities.**

**Learn how to stay safe with [our heat resources and tipsheets](#) on specific health conditions now available in both Spanish and English! Developed with AmeriCares and supported by Biogen. Read all about them in [STAT News](#).**

**We're part of the [Smart Surfaces Coalition](#), launching the Cities For Smart Surfaces initiative, which will deploy green roofs, reflective pavement, rain gardens, trees, and more to reduce citywide temps, improve health, reduce inequality, and slow climate impacts. Maybe you're the little bird that will get your city to join too. Check out the [press release](#) to learn more.**

**We'll be at [NYC's Climate Week](#), [Boston's Climate Week](#), and [COP28](#). Will we see you there? We'd love to chat about working together. Just hit reply and we'll get this party started.**

**Looking for inspiration?** Harvard Public Health's [new weekly newsletter](#) explores ideas and solutions in the world of public health — and introduces you to people making a difference around the globe. The stories focus on impact: What works, what doesn't, and why.



Got this as a forward? [Sign up to receive our future emails.](#)  
[View this email online.](#)

[Manage your email preferences](#)

This email was sent to [mfranck@hsph.harvard.edu](mailto:mfranck@hsph.harvard.edu).  
To continue receiving our emails, add us to your address book.

**Harvard T.H. Chan School of Public Health**  
401 Park Drive 4th Fl. West, Suite 415  
Boston, MA 02215

[Privacy Policy](#) | [Report Copyright Violation](#) | [Accessibility](#) | [Contact Us](#) | [Opt out](#)



