

November 29, 2022

Recieved as a forward? Subscribe here

By Marcy Franck

November brought to New England a spate of unusually warm days.

My friends' social posts fell into two categories: "This is amazing! Loving the summer vibes!

"accompanied by photos of bare feet on lawn chairs hastily rummaged from winter storage.

The other camp was more along the lines of "Oh my gaaawwd, I weep for our children's future!

"along with disgruntled selfies scowling into the sun.

My friend Beth called it "Nicelarming (adj): When the weather is very pleasant, yet you feel alarmed by its unseasonality." Indeed, nicelarming weather is one of the many dichotomies of climate change.

Living in an uncertain climate can totally screw with our brains. Our challenge is to "yes, and" the heck out of otherwise conflicting thoughts: We are experiencing a major crisis *and* we are making progress; catastrophes are upending life *and* we are preventing things from getting worse; we are running out of time *and* we will never stop trying.

We can take heart in knowing that our efforts are working. I like to tell my neighbor—who diligently composts, recycles, upcycles, and burns fallen trees for heat—that it's actually her regular investment in bamboo toilet paper that is driving this upward trend.

But it's more likely that the cost of renewable energy has fallen so quickly that it's cheaper than fossil fuels and it's rolling out at a pace that's <u>putting a meaningful dent in carbon pollution</u>. We can also thank a groundswell of public support, political will, and now, due to <u>three major</u> climate laws, the funding to tackle climate head on.

In this last issue of the year, we're going to peek at some big climate news on the world stage and relish a huge list of stateside climate actions that made quiet headlines in just the last couple months. Global promises are awesome, but it's hard to stay reassured unless you can see where the rubber meets the road ... or where the pilings bolster the turbines, as it were.

Read past issues View in browser

Donate

(Psst...it's Giving Tuesday!)

A WORLDWIDE URGENCY TO DECARBONIZE

Like a pee-pee dance, but with higher stakes.



World leaders met to tackle climate change at <u>COP27</u>, an annual event hosted by the United Nations. Some highlights leading up to and during the event:

- Wealthy nations that contribute the most to climate change agreed to help pay for climate damages in developing nations that are least responsible but suffer the most.
 Getting to yes was a saga worth reading.
- Brazil's new president promised to save the Amazon and formed an alliance with nations that are home to the largest rainforests to prevent deforestation.
- Indonesia received \$20B to ditch coal.
- Mexico vowed to make renewable energy <u>faster than the U.S.</u>—the best kind of fightin' words!
- The EU will phase out gas cars by 2035 and will fast-track their green energy transition.
- The U.S. and UAE aim to stimulate \$100B in investments for enough clean energy to power 750M homes.
- The U.S. and China will resume climate talks, which matters because China's current plan to keep burning coal would derail the world's goal to limit warming to 1.5°C.
- The U.S. joined the Global Offshore Wind Alliance with 9 other countries pledging to generate enough energy to power 250M homes by 2030.

What should you know about climate and health at COP27? Our Fellows shared their physicians' perspective from their time on the ground.

TWO MONTHS OF CLIMATE PROGRESS

For the most cathartic reading experience, cue the Chariots of Fire theme song.

The best thing about this list is that the size and scope is not unusual for any given month. We are hurtling toward a healthier, greener future.

Cutting fossil fuel emissions at a brisk pace



Researchers found that investment in wind and solar is set to surpass oil and gas drilling for the first time this year and, separately, we learned that one acre of offshore wind creates 12,500% more revenue for taxpayers than one acre of offshore oil. How 'bout them turbines?

Maine approved plans to build enough wind energy to power ~900k homes plus 100+ miles of transmission lines.



Washington state voted to mandate new construction to include heat pumps starting next July. So far, 90 cities and counties have policies that boost electrification.

The U.S. is on track to weatherize 2M homes by 2030, just allocated \$13B to help families pay for energy bills and home repairs, and earmarked \$250M for financing energy audits and retrofits.

A mad dash to bolster batteries



To fully stop pollution from fossil fuels, we need batteries to store solar and wind power when it's not sunny or windy, and U.S. storage capacity has more than tripled since last year.

Private investors have built or expanded 15 battery plants, creating a midwestern "battery belt" that's simply dazzling when paired with a gem sweater.



Innovators are creating <u>long-duration</u> **batteries** that will store power for days instead of hours, and the DOE is putting \$349M into research to <u>reduce the cost</u> of energy storage by 90% within the decade.

The race to recycle EV batteries just got a \$74M boost from the DOE, which will fund projects aiming to ease supply chain disruptions and decrease reliance on other countries.

Green grids take a victory lap



New England created a virtual power plant that sends excess power from rooftop solar to the grid, while earlier this year California kept lights on during a heat wave with a virtual power plant of in-home batteries. Texas, where renewables saved \$7B in 2022, will launch a virtual power plant to lower energy costs and bolster the grid.



Renewables are reliable in extreme weather: A Florida Man used his EV to power his home during Hurricane Ian because of course he did, and a nearby solar community never lost power. Homes with rooftop solar in Puerto Rico kept lights on during Hurricane Fiona, and clean energy microgrids kept lights on during extreme heat waves in Texas, California, and Oregon. And the list goes on!

Feds sprint to clean our air



EPA granted \$53.4M to improve air quality monitoring in 37 states to protect residents from dangerous air pollution and strengthened methane rules to cut emissions 87% below 2005 levels.

Nearly 400 school districts are receiving ~\$1B to buy clean school buses under a new federal program key to cleaning the air kids breathe at school.

The U.S. finalized 2 wind energy areas for lease in the <u>Gulf</u> of <u>Mexico</u>, while in May it canceled <u>3 oil lease sales</u> there due to lack of industry interest. Too bad, so sad!

Here's what we've been up to



Join the Boston Globe Climate Week event for the release of our new Climate Resilience for Frontline Clinics toolkit on Tuesday, December 6 at 12:30 PM ET. Our toolkit, created with Americares and financial support from Biogen, provides guidance to keep patients healthy before, during, and after climate shocks. Register now

To be more effective when talking about the health effects of climate change, try these 10 research-backed tips for climate communication.

Do you know a super cool climate creator? We're searching for our next cohort of <u>Climate Creators to Watch in 2023</u>, a project in collaboration with Pique Action. <u>Nominate your creative climate hero here.</u>

The Climate Optimist is taking a long winter's nap

With visions of bedazzled battery belts dancing in our heads.



This is our last newsletter of the year, but we'll be back with irreverent takes on climate change in January, soon after newly elected officials with big climate plans are sworn into office. All of us on Team C-CHANGE wish you a happy, healthy, and safe holiday season!

P.S. If you can't find the perfect gift for that special someone, offer them a gift subscription to *The Climate Optimist*, and we'll pretend it's usually very expensive.











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 marcella_franck@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 Copyright © 2022 The President and Fellows of Harvard College

