WHAT'S NEW ON EVERYTHING EARTH

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Renewables Not Free or Easy

Photos: Bittersweet September

Easy Elegant Poached Pears

THE NECESSARY PAIN OF DETOXING FROM FOSSIL FUEL

The transition away from fossil fuels counts on electricity to be generated from clean sources and sent along a complex network of transmission lines to power electric vehicles, homes and businesses. The scope of changes required to make that happen is enormous and the time in which to do it in order to avoid exacerbating the climate crisis is short.

Electrifying everything had become the proposed silver bullet for many policy-makers and environmentalists. But when the war in Ukraine and Russia's chokehold on gas exports super-charged the need for renewable energy sources, the world realized it was not ready.

Lacking mature renewable infrastructure, energy-starved countries turned back to gas and the dirtiest fossil fuel: coal. The world's largest economies increased short-term coal purchases, backtracking on <u>climate change</u>

<u>pledges</u>. Globally, coal consumption rose nearly 6% in 2021, contributing significantly to the biggest annual increase in energy-related CO2 emissions on record according to the <u>International Energy Agency</u>.

The reversal is being led by Europe. The combination of drought and <u>a record heat wave</u> added to an energy system already in crisis as Russia throttled gas deliveries to its heavily dependent consumer countries. Germany, Austria and the Netherlands–leaders in reducing fossil fuels—have all announced <u>emergency restarts of coal power</u> stations, again backtracking on climate goals. Germany, which has promised to eliminate coal as a power source by 2030, is among the nations now importing more citing a bitter but necessary situation.

Drought, too, is playing a role. Norway, the region's largest producer of hydropower, warned in early August that the country might have to curb hydro electricity exports to its neighbors due to drought for the first time in history.

California represents a microcosm of the challenge. The state is undoubtedly the U.S. renewables leader with fully 34% of its current production still coming from renewables. (Gas, coal and nuclear still account for 50%.) The state has been stretching its renewable-energy supply largely by using batteries, conservation and rolling black-outs. The heavily solar-dependent system, though, could crumble if the heat persists.

Electrifying everything is challenging. But perhaps more important it is premature. If you are charging an electric car in West Virginia where 89% of electricity is generated by coal there is little environmental benefit.



The world is on its way to clean energy sources; jump-started painfully but perhaps fortunately in the long-term, by Russian use of energy sources as a weapon. Innovative forms of clean energy production and storage are now in high gear. Giant arrays of batteries that charge at night when prices are low and efficiencies high are being installed by utilities and promoted by asset managers. Investment in battery storage is expected to more than double this year globally and some companies are learning how to recycle or replace environmentally damaging batteries.

Slowing the push to electrify everything and instead focusing on developing robust clean energy production, efficient batteries, storage and transmission seems a reasonable if less-satisfying action than immediately building charging stations possibly dependent upon coal and gas for electricity production.

PHOTOS: BITTERSWEET SEPTEMBER



My sweet boy *Wink* escaped and has gone missing. Please look into those soulful green eyes and send positive thoughts

heavenward to help him find his way home.
Namaste, my friends.

Roses love the heat and grace us with their sweet scent in fall.

'A rose by any other name would smell as sweet' – from William Shakespeare's play Romeo and Juliet, spoken by Juliet Capulet.



Please see <u>September</u>

Flowers for more sweet-smelling September flowers.

SEPTEMBER RECIPE: POACHED PEARS IN MUSCAT WINE



Most poeached pear recipes call for a serving of ½ pear. NO! This recipe will leave your guests looking for their other half. Six pears serve six people.

- 6 firm Bosc pears (about 3-4 pounds)
- 1 bottle Muscat dessert wine, white or pink
- 1 cup sugar
- 1 tsp. real vanilla
- Mint leaves or edible flowers for pretty
- Coconut-based ice cream such as Coconut Bliss or Nada Moo

Halve pears lengthwise and core, leaving stems intact. Put pears in a 5- to 6-quart pot. Add wine, sugar and vanilla.

Add enough water to barely cover pears, no more than 1 cup. Cover and bring

to a simmer over medium heat. It helps to use a lid or tart pan that fits inside your pot to hold pears under liquid.

Reduce heat and simmer on low—stirring occasionally until pears are as soft as butter—for 15-20 minutes. With a slotted spoon, remove pears and set two halves in each serving bowl.

Bring remaining liquid to a gentle boil uncovered over medium heat until reduced to about 2 cups, 10-15 minutes, *stirring continuously to avoid scorching pan*.

Pour about ¼ cup syrup over each serving. Tuck in ice cream and mint leaves or flowers.

Make ahead: Up to 1 day, pears and syrup chilled airtight until plating.

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