



A special year-end publication for Members

**The Darwin energy/environment award  
Heat Tourists**



Death Valley, one of hottest places on Earth, drew record visitors this year, not in spite of near-record high temperatures but because of them. The most popular destination, [Furnace Creek](#), set a record for one of the hottest outdoor temperatures ever recorded: 134F, or 56.7C. The "coolest" visitors dress in their warmest clothes, like a fur coat, take a selfie next to the outdoor digital thermometer, and then post on social media. The most popular item for sale in the air conditioned visitors center is water. Of course a few tourists have died in spite of signs that warned "during periods of extreme heat, rescue is not guaranteed."

*Note:* This award is given in honor of Charles Darwin, the British naturalist who came up with the theory of evolution; the Darwin Award commemorates those who don't understand or fully appreciate the power of energy.

### **Do as I say, not as I do**

The top 5 **most** tweeted topics in 2023 by Shell, ExxonMobil, BP, and TotalEnergies:

1. Solar
2. Wind
3. Clean hydrogen
4. Biofuel
5. Natural gas

*Note:* These same four oil & gas majors spend less than 1% of their capital expenditures on items 1, 2, 3 and 4 above.



### **"If it isn't counted, it doesn't count." - Albert Einstein ([paraphrased](#))**

Advocates of renewable energy generally do not count the cost of storage as part of the total costs of generation (aka, the difference between firm vs. variable costs). However, solar and wind are only cheap when:

- All of the output is used at the moment it is generated;
- There is no need for power at any other time of the day.



*Note:* If neither are true, then storage is required and should be considered an essential cost.

### **Climate priorities are academic**

Few universities do more to lower global emissions than Stanford and UC Berkeley. However, when both schools shift from the Pac12 to the ACC athletic conference next year, no university athletic programs will have greater carbon footprints. At best, academic faculty and administration are not talking to their athletic departments; at worst, they are, and the decision to move forward with the change reflects the universities' highest priorities.



## If only for marketing purposes...

Mongolia might like to change its name to "Mine-golia." Stuck between China and Russia, the country is also a powerhouse supplier of critical minerals for US clean energy projects.



## A hotter world, a sample of photos

A traffic light melts in India (left).

A road bakes and buckles in Yellowstone National Park (upper right).

High temperatures cause a heat "kink" in the DC metro tracks (lower right).



## Material for Jimmy Kimmel

The US House Energy and Commerce Committee sent a [letter](#) to US DoE Secretary Jennifer Granholm asking about her use of taxpayer money to fund four "international trips" to Puerto Rico. The only problem ... *Puerto Rico is a territory of the United States, not a foreign country!*



## Optics illusion

On November 14, the US and China signed an agreement "to end plastic pollution." However, a few days after signing the agreement, China signed a contract with Exxon to build the world's largest petrochemical complex in China's Guangdong Province to produce polymer-based plastics. The facility will cost \$10 billion and will begin producing about 1.6 million metric tons of plastic by 2025. Today, plastic manufacturing generates about 260 million tons of emissions each year — the equivalent of driving 57 million gasoline-powered vehicles. This new facility will add another 80 million tons of annual emissions.



## Weatherman causes a storm

Chris Gloninger, the chief meteorologist for CBS affiliate KCCI in Des Moines, Iowa, spent the past 18 years reporting the weather. This year, Chris began to include the term "climate change" in his reporting. A few months later, Chris [tweeted](#): "After death threats immediately stemming from my climate coverage ... I've decided to begin this journey (aka retirement) \*now\*"



## The dimmest bulb in the energy chandelier?

### The entire "do-nothing-est" Congress in US history.

With most of the focus in DC on implementing the IRA and infrastructure law from last year, the current 118th Congress has done almost nothing for energy or the environment this year.

- Simple legislative items, like the nation's petrochemical safety program, were allowed to expire.
- The high-profile ESG bill considered by the US House in July? It hasn't even gotten a floor vote.
- Permitting reform? Crickets.
- Bipartisan legislation to develop domestic supplies of enriched uranium for commercial power plants? Maybe, but not yet.
- Lawmakers haven't been able to agree on big issues either, like the Farm Bill or spending bill for the Departments of Energy or Interior, or the EPA.



"I can't think of what we've done this Congress on energy."

- Senator Bill Cassidy (R-Louisiana)

"I guess we've voted to censure a lot of people."

- Representative Sean Casten (D-IL, 6th district), reflecting on legislative achievements of 2023 Congressional energy committees.



## New math carbon accounting

"Hard-to-abate" sectors are, by definition, hard to abate.

Total US emissions by sector:

- Electric Power (25%)
- Transportation (28%)
- Industry (23%)
- Buildings (13%)
- Agriculture/Food (10%)

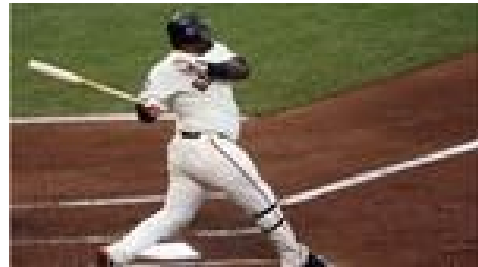


However, in order to draw attention to a particular sector, there's a tendency to round-up or exaggerate a sector's total emissions to a point where the sum total is greater than 100%. The most egregious example claims that 25% of emissions comes from cattle for beef when total food production is 10% (see above).

Emissions accounting is beginning to sound like the classic Sesame Street episode where Ernie and Bert try to cut an apple pie 50-50-50.

## Going, going, gone!

Since 2010, about 500 total home runs have benefited from warmer temperatures caused by climate change. Had they been hit in any year prior, they would have only been long flyball outs.



**"I pledge allegiance,  
To the flag,  
Of the great garbage patch in the Pacific..."**



If it could be inhabited, Plastic Island in the Pacific Ocean, already 3 times the size of France, would become the seventh continent in the world.

## Sleepy the bear

Bears in Siberia are wandering around "half-asleep" this winter because it's too hot.



## Do **NOT** look for this needle in a haystack

A "highly radioactive" capsule (8 mm long) **fell off** a Rio Tinto mining company delivery truck somewhere along a 1,400-kilometre (870-mile) stretch of highway in Western Australia. The WA Health Department issued a warning: "exposure to the widget could cause radiation burns or radiation sickness."



The widget has yet to be found.

## Jevon wasn't necessarily wrong

One of the best selling products on Amazon is an outdoor 120-watt "**bulb**" that produces 12,000 lumens — the marketing slogan for the bulb is "dusk into dawn." It is so bright that the instructions on the box warn users not to look directly at the light to avoid potential eye damage.



For comparison, an old-school 60-watt incandescent bulb generates 800 lumens, so this new bulb is 15x brighter! Perhaps it is also worth noting that outdoor lighting is a good example of when improved energy efficiency leads to an *increase* in electricity consumption.

## Why do today what can be put off until tomorrow

The primary objective for delegates at the first world environment conference in Stockholm in 1972 was a "binding international treaty" that would reduce plastic pollution. Fast forward to the present: the gavel came down on a historic resolution at COP28 in Abu Dhabi that established a "legally binding agreement to reduce plastic pollution" ... to be *discussed* at COP30 in 2025.



## Captain Obvious Award

"After careful reassessment, the energy transition needs to be grounded in energy security."

- The conclusion of the IMF in "The Scramble for Energy," F&D (What does 'the' mean, anyway?)



## If the shoe fits throw it away

Lacoste has a program in which the company destroys all unsold new shoes before sending them to landfill in order to create artificial scarcity and keep prices higher. (Photo insert: bin full of slashed shoes.)



## Bad media #1 - tautology (aka reporting the obvious)

"Given the intensifying realities of climate change, phasing out gas-powered vehicles is a must."

"... United Arab Emirates is a major oil and gas producing country, ..."

"... fossil-powered energy continues to emit dangerous atmospheric emissions."

\* Note: Names and sources were redacted to avoid embarrassment.



## Bad media #2 - confusion

*China Cleantech Revolution Surging*  
and,  
*China Consumption of Coal and Other Fossil Fuels Surging*



Does the *Guardian* read its own material? These two headlines are from essentially the same news cycle — both items may be true, but what should a reader take away?

## Bad media #3 = #1 + #2 (tautology + confusion)

"India is burning ever greater amounts of coal and oil as it tries to meet the needs of its 1.4 billion people. But it also has huge renewable potential."  
— CNN headline on Yahoo! News

*Obvious! But what do you do with this "news?"*



## Worst energy acronym

In search of unlimited sources of energy, NASA sponsors research on gamma-ray bursts, powerful high-energy transient emissions from sources at cosmological distances.

The name of the research project is called: High-Energy Resolution Bursts ... or HERB for short.



*Editor's note:* The reigning all-time champion for worst acronym is **US President Jimmy Carter** and his inspired call in 1977 for public mobilization in pursuit of energy independence: *Moral Equivalent Of War* ... aka "[MEOW](#)."

## Gas-lighting at COP28

COP28 president Ahmed al-Jaber (condescendingly) told Mary Robinson — former president of Ireland — during a fireside chat that he was there for "mature" conversation (as if she wasn't). But was he there for an "honest" conversation? Ahmed al-Jaber is also head of the Abu Dhabi National Oil Company,



## Bean there, done that

In a single night, Belgian anarchic climate activists who call themselves the Tyre Extinguishers "**disarmed**" 194 SUVs and EVs across Brussels and nearby Ghent. How? By sticking lentil beans in the tire air valves. Their goal? "Make car ownership socially toxic and shatter the myth as a symbol of wealth, comfort and power."



## How do you moo-ve?

In terms of emissions, riding a bike (or walking) is always better than driving any car, even an EV ... unless the cyclist (or pedestrian) eats [soy-fed](#) beef.



## Flip-flop award: The winner is ~~IPCC~~. No wait! It's Jim Skea.

Recent IPCC reports have been very clear: we are about 5 - 8 years away from surpassing our 1.5°C carbon budget. However, the chair of the IPCC, Jim Skea, [says](#): "for the 1.5°C threshold, we need to reduce "oil use by 60% and [natural] gas by 45% ... by 2050."



Which is it? Reduce emissions by 2030? Or by 2050? There is a *big* difference.



## Who had the *best* energy year?

### Purple states

According to *NPR News*, 9 of the 10 biggest beneficiary of IRA funding in 2023 were "purple" swing states, especially:

- Arizona (\$8.3 billion)
- Nevada (\$9.1 billion)
- North Carolina (\$9.6 billion)
- Georgia (\$18.8 billion)
- Michigan (\$21 billion)



## Who had the *worst* energy year?

### Joe Manchin

Without Senator Joe Manchin (D, WV), President Biden never would have passed his signature legislative achievement — the Inflation Reduction Act, a \$740 billion package that featured the largest climate investment in US history. However

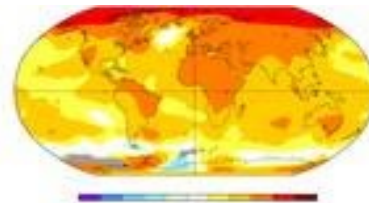


...

- The massive spending bill took a sledgehammer to Manchin's image back home in West Virginia; indeed, the long-time 3-term Senator announced that he will not run for re-election, and he probably will not run for President as an Independent with the No Labels party, either.
- He often disagrees with the interpretation of the funding package and how the money is distributed, but no one is listening.
- The US has been investing in his pet-project -- transmission infrastructure -- but without his input or influence.
- Meanwhile, West Virginia, the coal-reliant state that Sen. Manchin represents, has the least reliable electricity in the country, and generates 88% of its power from coal.
- And, on October 14 of this year, he admitted to Democratic political consultant James Carville, that "*it has been a bad year.*"

## Another "No Good Very Bad Year"

**The climate (again).** Note: the climate has won this award 11 years in a row because the years 2013 through 2023 rank among the top 10 warmest on record, according to [NOAA](#).




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654 Gilman St  
Palo Alto CA 94301  
USA