

Solar Solves Everything*

***Or rather, heavily contributes to solving a surprisingly large amount of the world's biggest problems**

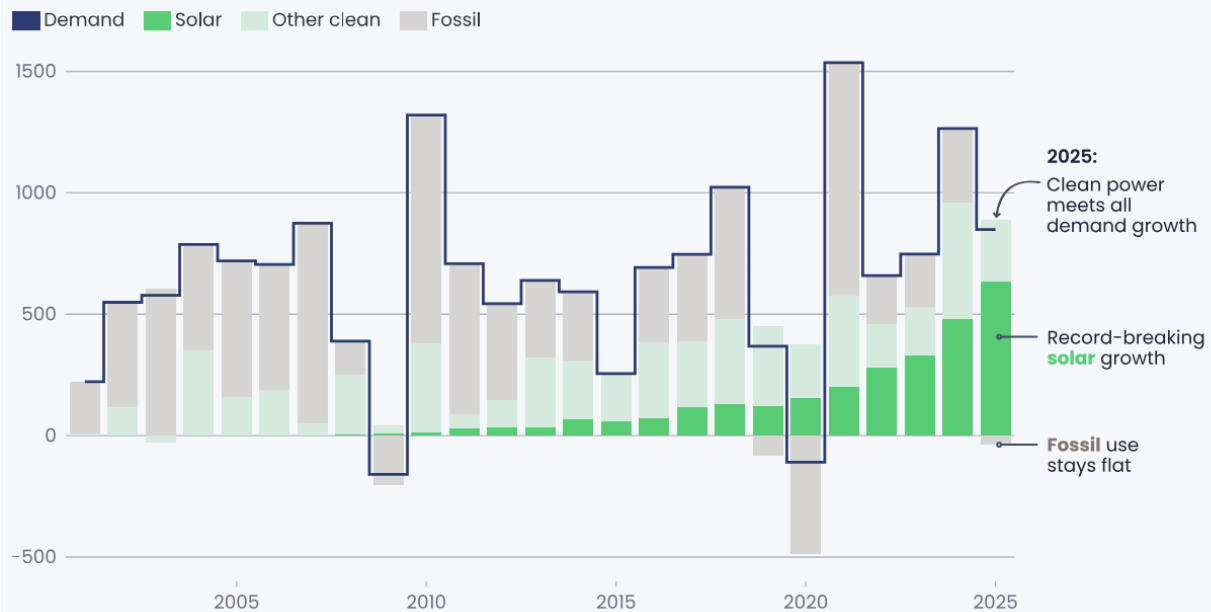
Aug 24, 2026

Solar Solves Energy

Solar solves energy because it's generating electricity by tapping directly into a billions-of-years-old nuclear reactor 93 million miles away that is so utterly immensely gigantic it makes Earth look like a pool ball by comparison. It's been the cheapest source of electricity on the planet and the overwhelming majority of all new-built electricity-generating capacity worldwide for five years straight now, and it's just getting started.

Clean power growth exceeded the rise in global electricity demand in 2025, keeping fossil generation flat

Annual change in electricity generation (TWh)



Source: Yearly electricity data, Ember • 'Other clean' includes nuclear, wind, hydro, bioenergy and other renewables such as geothermal

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Source.

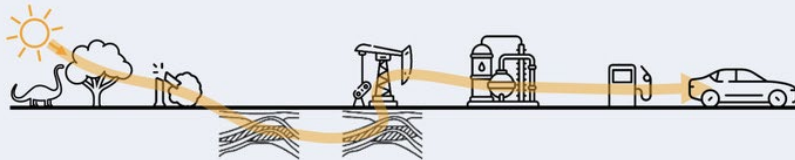
I sometimes think that we forget too easily what this technology actually *is*, and just what an incredible new foundational accomplishment it is for human civilization. **Solar panels are simultaneously a humble, friendly, low-impact, zero-pollution power system suitable for your balcony or backyard and a personal conduit to unfathomable cosmic power¹.** There's just so *much* energy produced by our Sun! Even the fraction of a fraction of a fraction of this star's

energy output that reaches the surface of Earth as sunlight adds up every *five days* to more usable energy than burning the world's entire known fossil fuel reserves!

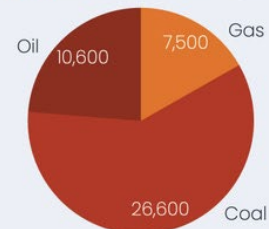
From burning old sunshine to using it real-time

The sun supplies more energy to Earth every 5 days than all fossil fuel reserves

Fossil fuels



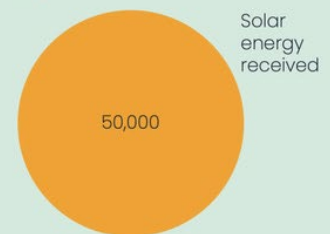
Total terrestrial energy reserves for the rest of time, current estimates, global, EJ



Electrotech – solar



Solar energy received from the sun every 5 days, EJ



Sources: E!; Ember analysis. Note this is all solar energy received by the earth. We only need to extract a small fraction of it.

EMBER

[Source.](#)

And then there's BATTERIES! Solar's best friend, the parallel revolution, the electricity silos, arbitraging electrons across time, extending the sun's rays into the night, bringing solar asymptotically close to becoming its own source of 24/7 baseload power as the tech keeps progressing! This kills the intermittency problem stone dead and solidifies solar's status as the new foundational power source for human civilization.

Battery storage costs are falling rapidly as uptake booms

The cheaper it gets, the faster it goes, and the faster it goes, the cheaper it gets

Utility-scale energy storage cost, global

3,000 2024 USD/kWh

Utility-scale energy storage sales, global

200 GWh



Note: 71% CAGR is for 2010–2024; 2020–2024 CAGR is 94%
Sources: IRENA, Ember

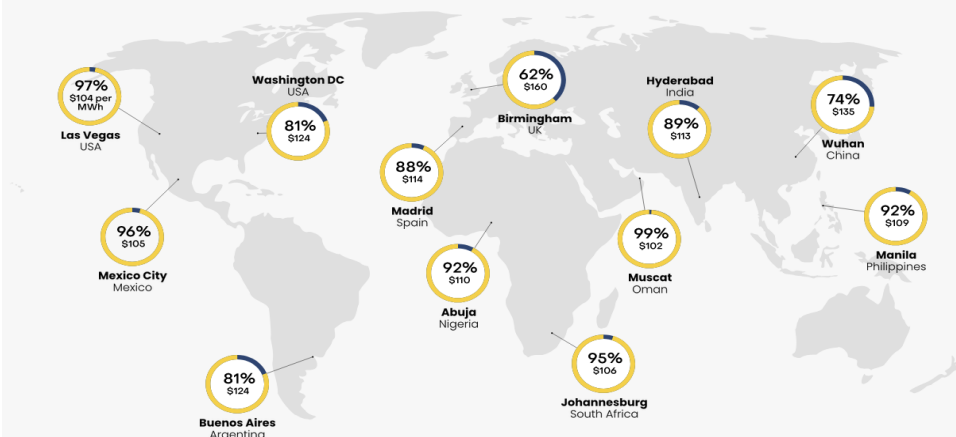
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Source.

More available energy makes pretty much anything we humans want to do substantially easier. And so far at least, it's been strongly associated with improved outcomes in key human-wildlife statistics like life expectancy, literacy, and women's rights. More energy availability may sound greedy or wasteful, but in practice it disproportionately benefits the most vulnerable among us, the people most likely to be forced into dirty and dangerous muscle-power tasks from smoky cookstoves to back-breaking water-carrying.

Many sunny places can get at least 90% of the way to constant 24/365 solar generation from around \$100/ MWh

Share of 1GW constant electricity supplied, using 6 GW solar with 17 GWh battery (2005–2023 average), and Levelized cost of electricity, USD/MWh



Source: Ember analysis of JRC hourly solar radiation data
Key assumptions: CAPEX – \$388/kW solar, \$165/kWh battery; Other costs: \$76/kW grid connection; \$48/kW inverter; 10% total cost markup for soft costs; 7.7% discount rate over 20 years lifetime; losses: 3.8% PV to grid; 5.6% PV to grid via battery; 90% usable battery capacity

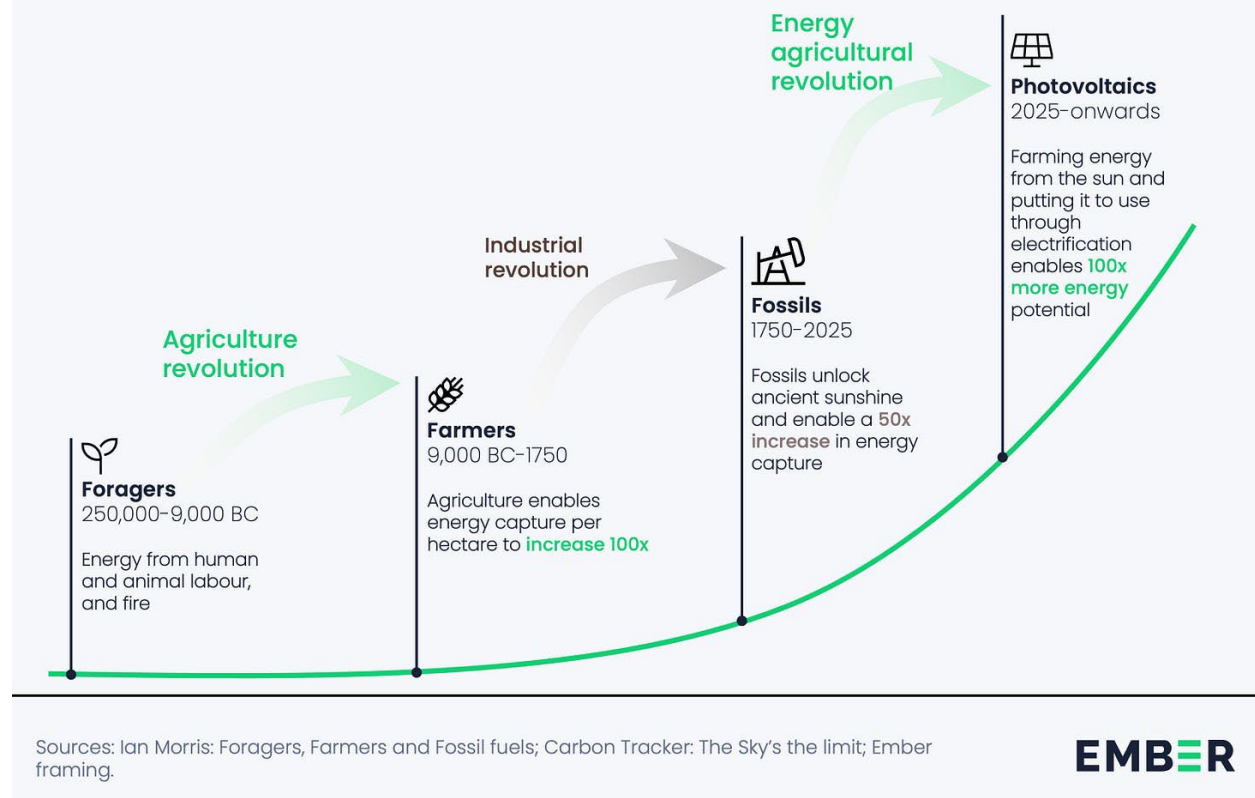
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Source.

The Electrotech Revolution is the third titanic changing-everything phase-shift of human history, after the Agricultural Revolution and the Industrial Revolution. As Ember² consistently discusses, human history in the long run may conveniently be periodized in four stages of increasing access to usable energy. Foragers, Farmers, Fossils...and now Photovoltaics.

Foragers, Farmers, Fossils, Photovoltaics

Electrotech enables another 100x leap in energy abundance



[Source.](#)

We are beginning to truly channel the power of our local Star, and it is a momentous step forward in the history of humanity. In my opinion, this is both the best and most important thing happening on Earth right now. It's bigger than the energy sector, bigger than the much-hyped AI industry, definitely bigger than politics. The Big Good to fight the Big Bad of climate change, potentially in the very long term of more lasting importance than the threat of climate change itself. The Solar/Battery Revolution will touch every aspect of human life, and signs are good that it will solve or at least drastically ameliorate a heck of a lot of our civilization's biggest problems!

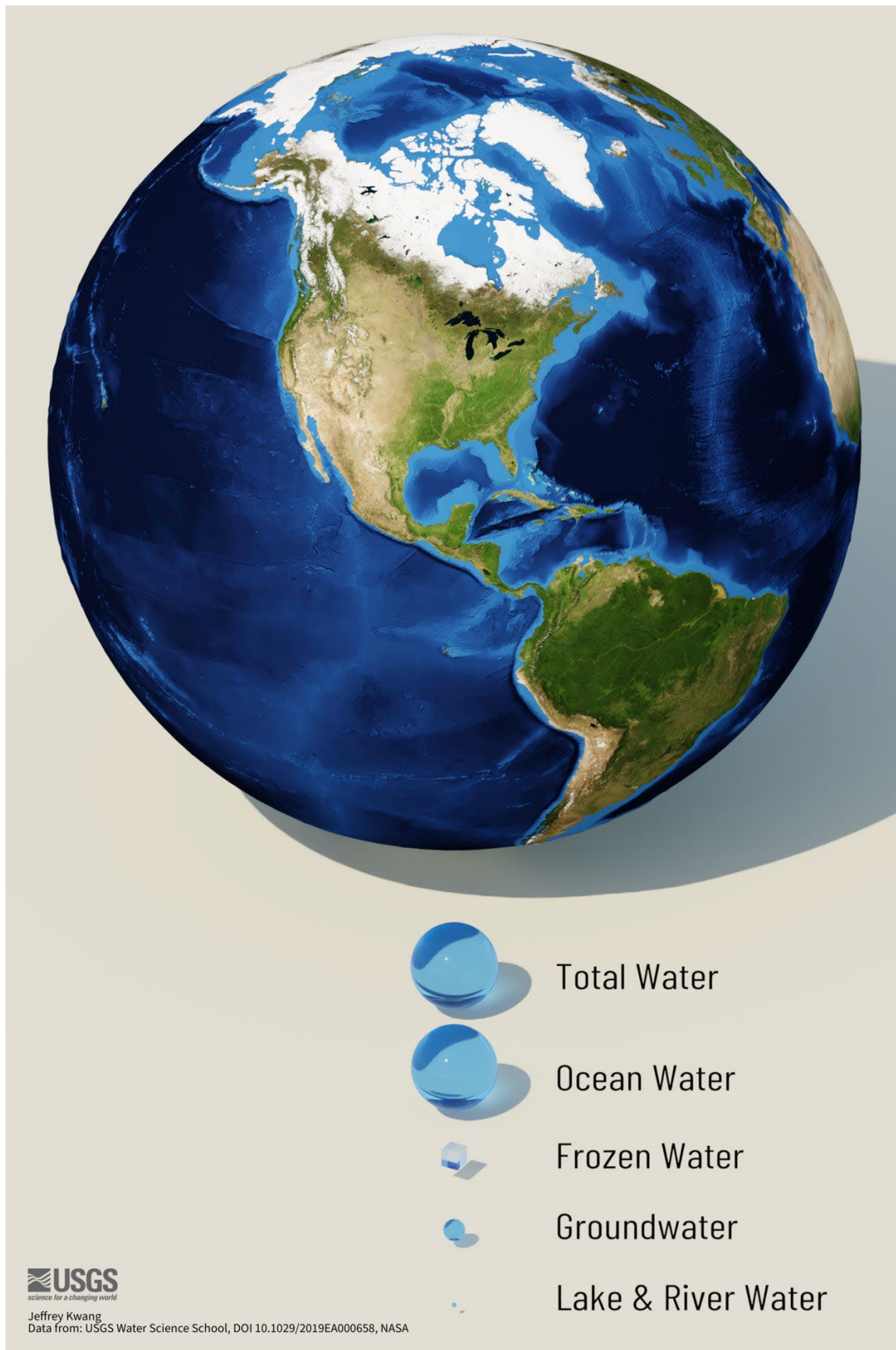
Solar Solves Water



Residents draw water from a solar-powered public tap in Ohafia. *Photographer: Rachel Seidu for Bloomberg Businessweek*

[Source.](#)

Solar solves water through **desalination**. (Not even getting into the incremental benefits of improved solar-powered wells and taps, which I'm categorizing under "energy")! An overwhelming majority of the water on the surface of planet Earth is salt water in the oceans, most of the remainder is frozen in ice caps and glaciers, and only a relative trickle is available as liquid fresh water. Desalination works, but cheap, abundant solar power (plus the new materials science in membranes for osmosis techniques) is making it much, much cheaper. If humanity can tap the water reserves of the oceans, we need never, ever run out of water to drink. Water shortages anywhere in the world become a policy failure, not an external constraint.

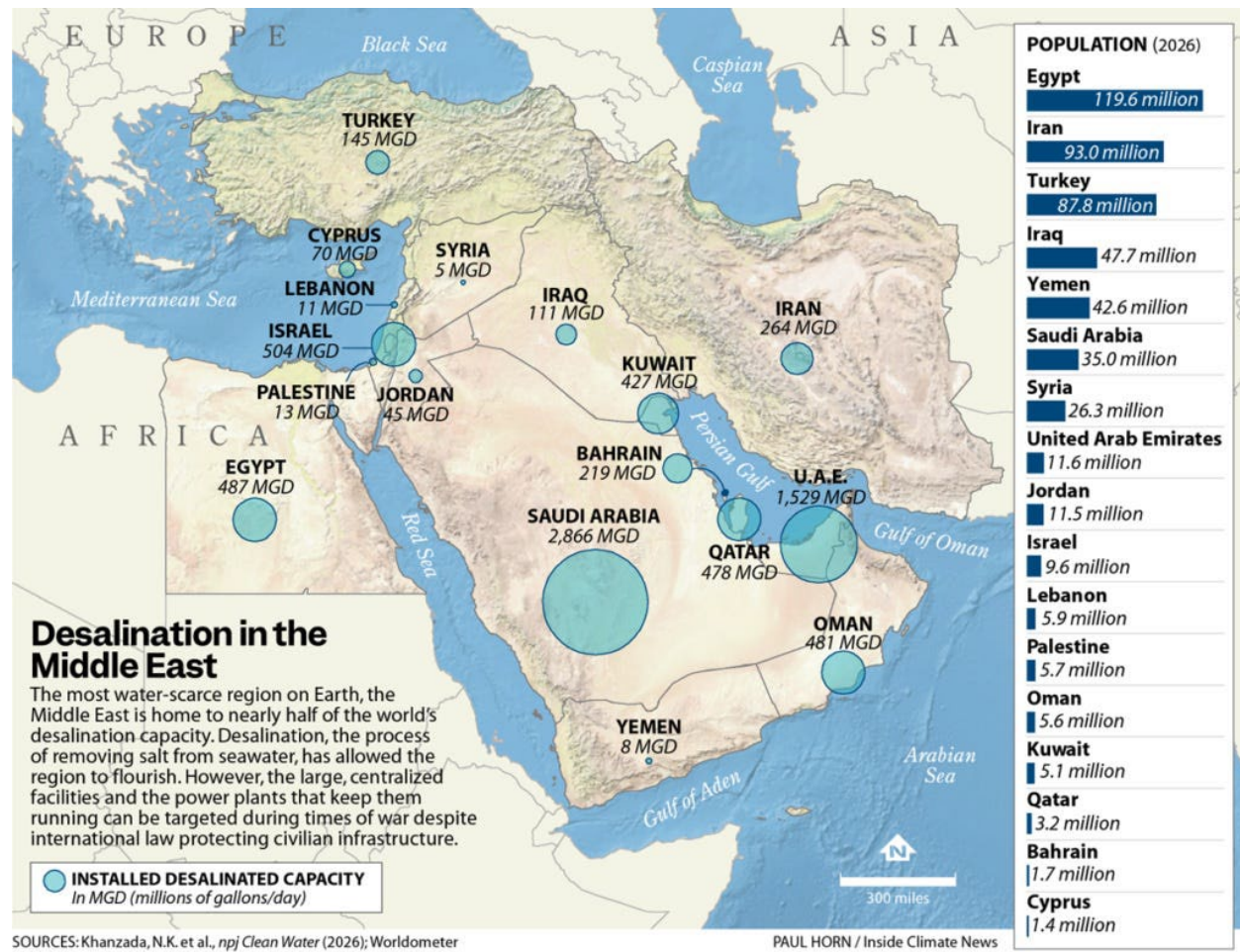


[Source.](#)

And a good thing too, because climate change is threatening the reliability of surface fresh water. In dry areas of the world from Australia to the Middle East to southern California, desalination

plants are being built at a rapid pace, slaking the thirsts of entire cities and providing some stability in an age of extreme weather shifts. We're already seeing examples of rapid desalination progress and fascinating new paradigms from around the world!

Saudi Arabia recently [achieved](#) a new **world record** for ultra-energy-efficient **desalination**, getting fresh water from seawater with less energy use than ever before. Their new cutting-edge **advanced reverse osmosis unit** at the **Yanbu desalination complex** ([partially](#) solar powered!) has a [capacity](#) of **200,000 cubic meters** of water per day, and [record-low energy use](#) of **1.55 kWh** per cubic meter.



[Source.](#)

The Middle East already relies heavily on desalination to remain habitable, and this paradigm is likely to accelerate.

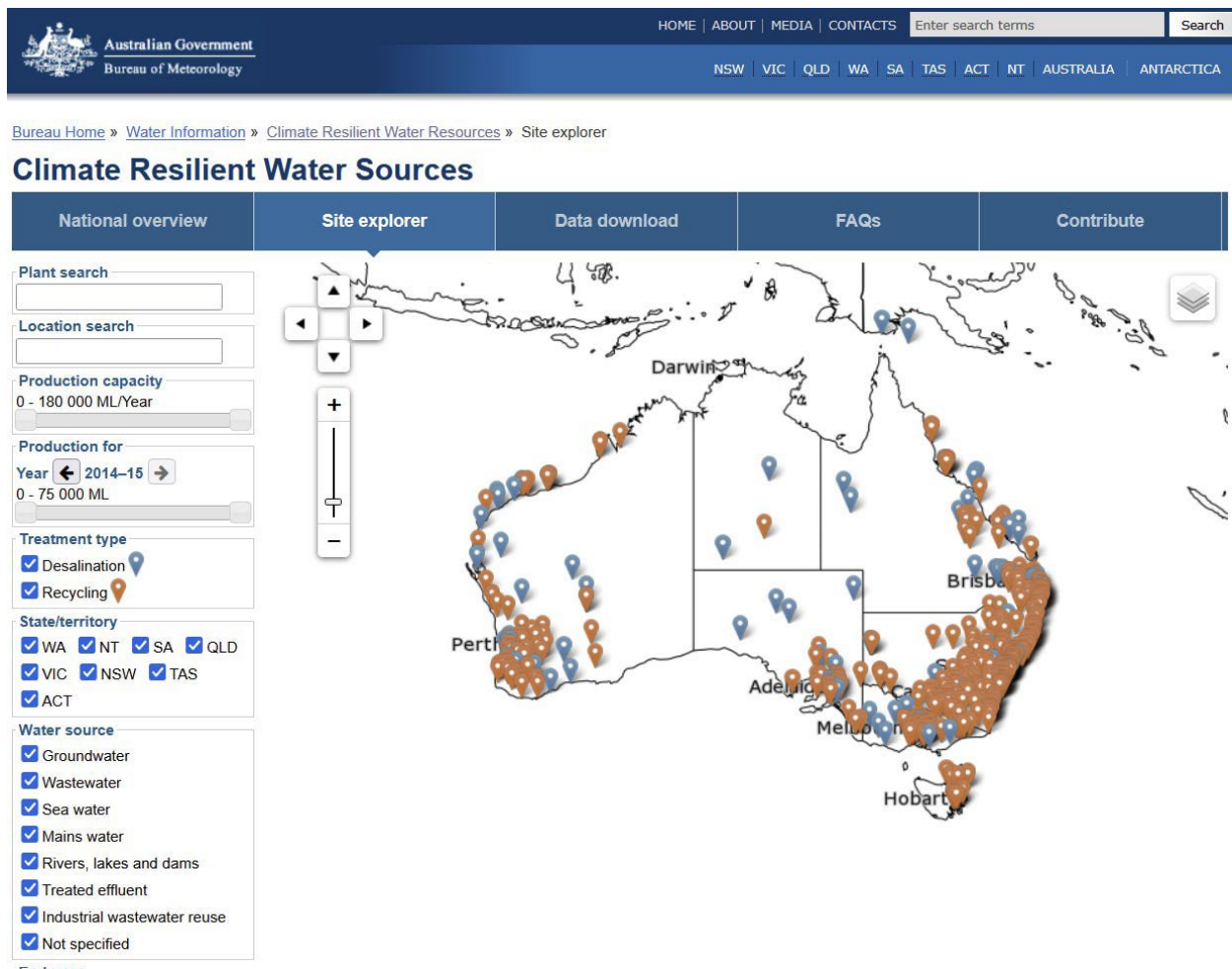


Some Western states want to invest in more Pacific Ocean desalination plants, with the aim of securing more of California's rights to Colorado River water. JOHN FRANCIS PETERS FOR WSJ; SAN DIEGO COUNTY WATER AUTHORITY

[Source.](#)

San Diego, California, once a water-stressed city, has [become](#) an indirect **water exporter** due to the excellent performance of its new **Carlsbad desalination plant**, online since 2015 and the largest in **North America**. As the Colorado River grows drier, the states of Arizona and Nevada (and [reportedly](#) soon Utah as well) are now in talks to fund more California desalination and water recycling projects in exchange for some Californian river water rights. The American West drought is getting some innovative solutions!

Desalination is expanding. In 2026, two companies and two county governments in **Texas** have [signed off](#) on a new partnership to build a gigantic new advanced-reverse-osmosis **desalination plant** on **South Padre Island** with a capacity of at least **50 million gallons per day**. This could [potentially](#) “drought-proof” the entire **Rio Grande Valley** region ([currently severely water-stressed](#) to the point of risking draining the river!) by providing a consistent supply of drinkable water from the Gulf of Mexico!



This map is from 2015 — ten years ago. [Source](#).

In Australia, there are already [major desalination projects](#) providing much of the water supply to the cities of Perth, Adelaide, Melbourne, Sydney, and the Gold Coast region of Queensland. More and more are [under construction](#).

Desalination's negative environmental impacts are on track to be greatly reduced, if not eliminated entirely. There are [a great multitude of pioneers](#) fine-tuning upgraded models of desalination that minimize negative effects on marine life, for example diffusing brine discharge over a harmlessly broad area or using the salt and minerals in industrial applications. And when you look at the global picture, the seas of Earth are getting more full of water and slightly less salty anyway as the Greenland ice cap melts, so removing a little fresh water (at a much, much smaller scale) is just moving the needle very slightly back towards pre-Anthropocene conditions.

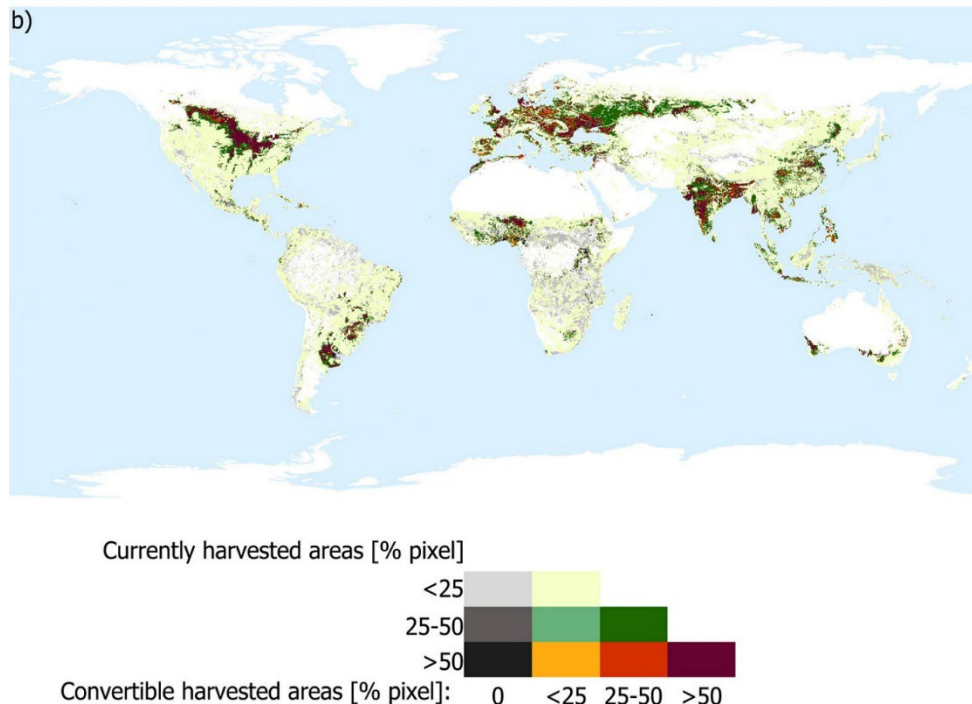
Desalination is increasingly a core civilizational competency, slaking cities' thirsts in a warming world. As desalination is overwhelmingly likely to keep scaling up fast, there's fascinating potential for substantial knock-on effects to benefit biodiversity by humans reducing consumption of the surface fresh water we share with wild ecosystems – or even, in the future, using desalination to produce more fresh water to keep drying lakes, rivers, and swamps alive on a hotter planet.

Solar Solves Food



[Source.](#)

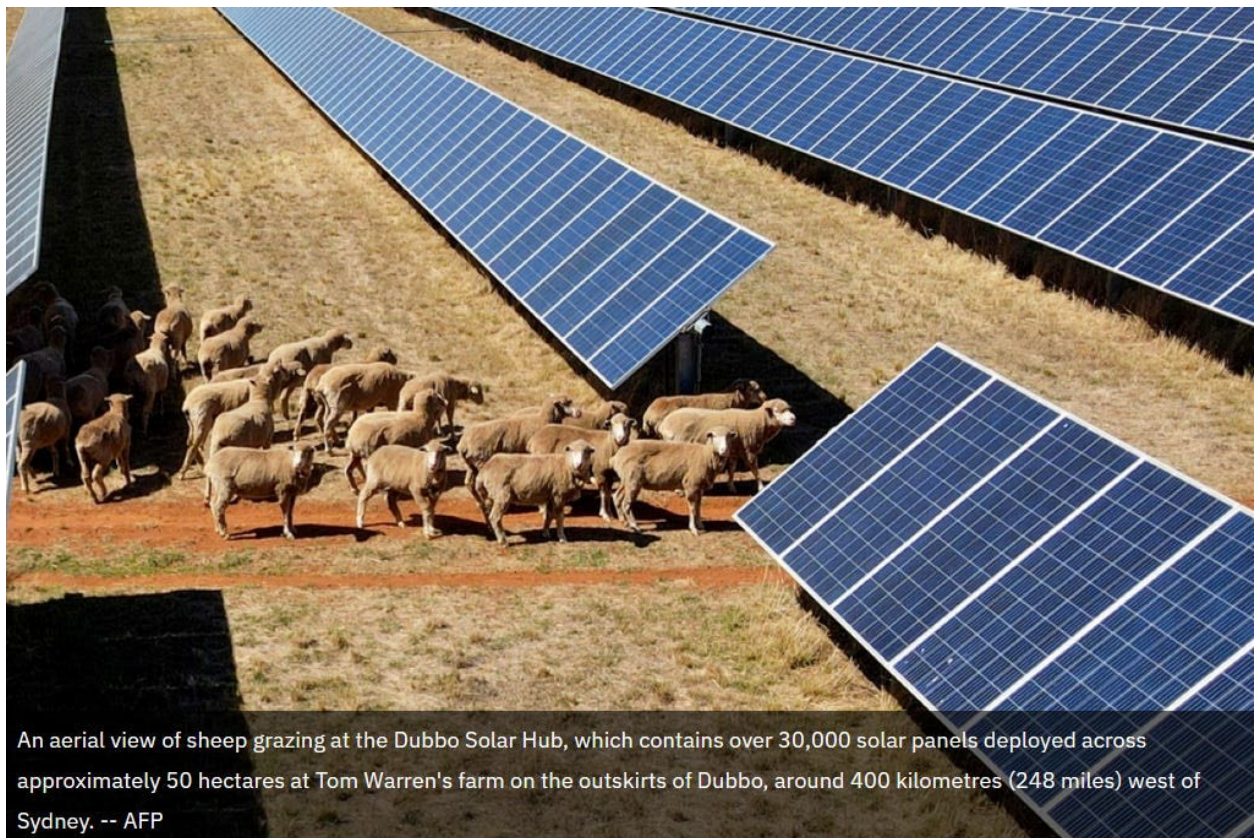
Solar solves **food** through **agrivoltaics**, soon to be joined by scaled-up **cellular agriculture**! And that's not even counting the many second-order factors related to energy electrotech just being better in general, like the emerging worldwide surge of electric farm equipment and irrigation wells reducing dependence on vulnerable diesel imports!



[“Global distribution of rainfed areas harvested and/or convertible to agrivoltaics for the scenarios that produce the lowest \(a\) and highest \(b\) convertibility globally.”](#) Basically, this “b” map is the “**best case scenario**” for which current farmland can host **agrivoltaic** solar panels without major harm to yields. It’s a lot!

A landmark [new study](#) from 2025 has calculated that **agrivoltaics**, the growing of crops under solar panels, is suitable for a very large chunk of all existing farmland across Earth’s surface. Their headline result is that about **22% to 35%** of rain-fed harvested area globally would likely **continue their current crop yields** if solar panels were added, with the agrivoltaic setup helping to reduce **water stress** by protecting the crops from heat! And I wouldn’t be surprised if that’s a conservative estimate by now, because new studies on crops performing well under solar shading just keep *pouring* in from around the world. I could write an entire weekly newsletter on agrivoltaics alone and never run out of stories.

As with much else, China is ahead of the curve on this. China had over 500 agrivoltaics [projects](#) two years ago in 2024, and many more have been built since. Solar panels have been [installed](#) over sites ranging from livestock grazing areas in Inner Mongolia to tea plantations in Yunnan to leafy vegetable-growing greenhouses on the island of Hainan.



[Agrivoltaics has improved wool quality at the Dubbo site in New South Wales.](#)

Shade and a windbreak - it helps keep moisture in the soil! With the rise of agrivoltaics, plus the incredibly fast rise of new precision-bred heat-tolerant higher-yielding climate-resilient crops

around the world in recent years, I personally think that the long-feared apocalyptic of climate chaos-driven famines is no longer an inescapable trap, but entirely avoidable and overcome-able.



Solar Foods' Factory 01, built in an unassuming factory building near **Helsinki, Finland** thanks to some **European Union** funding [support](#). **This facility makes protein powder from electricity and thin air!**

And that's just the *first* wave of how solar directly benefits food production. We already have working prototype factories in Finland doing commercially viable cellular agriculture, growing and fermenting a particular species of **microbe** (in a setup similar to how beer is brewed) with only **renewable electricity** and **carbon dioxide** needed as inputs, to produce human-edible **Solein** protein powder! It's now scaling up fast, with the second (much larger) factory being built.



[Solein emits 200 times less CO₂-equivalent than beef \(and five times less than plants\) per kilogram of protein.](#)

Precision-fermented protein is the most sustainable food in the history of the world. It is to plants what plants are to beef, using much less water and land while causing much lower greenhouse gas emissions.

It's completely independent of weather or soil conditions, a mass protein production strategy suitable for a Mars base — or a global network of climate disaster-proof backups on Earth, potentially up to the task of ending hunger forever.

This very year, 2026, saw a protein powder enriched with Solein, the first calorie source in human history not sourced directly or indirectly from photosynthesis, go on sale in the United States for the first time. There are dozens more products being developed for sale in markets around the world.

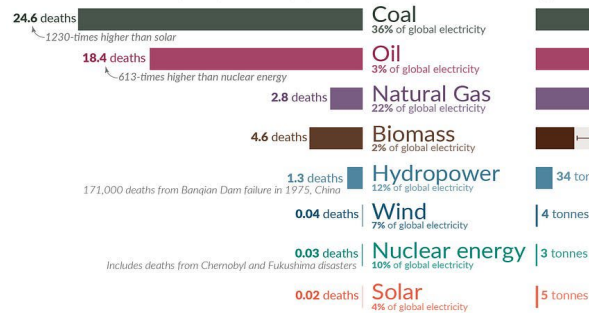
The Solein-making Finnish startup's name? **Solar Foods**. It's only just beginning to scale up, and there are many more in the field. Watch this space!

Solar Solves Health

What are the **safest** and **cleanest** sources of energy? Our World in Data

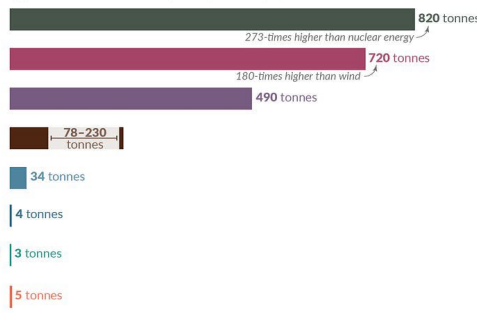
Death rate from accidents and air pollution

Measured as deaths per terawatt-hour of electricity production.
1 terawatt-hour is the annual electricity consumption of 150,000 people in the EU.



Greenhouse gas emissions

Measured in emissions of CO₂-equivalents per gigawatt-hour of electricity over the lifecycle of the power plant.
1 gigawatt-hour is the annual electricity consumption of 150 people in the EU.

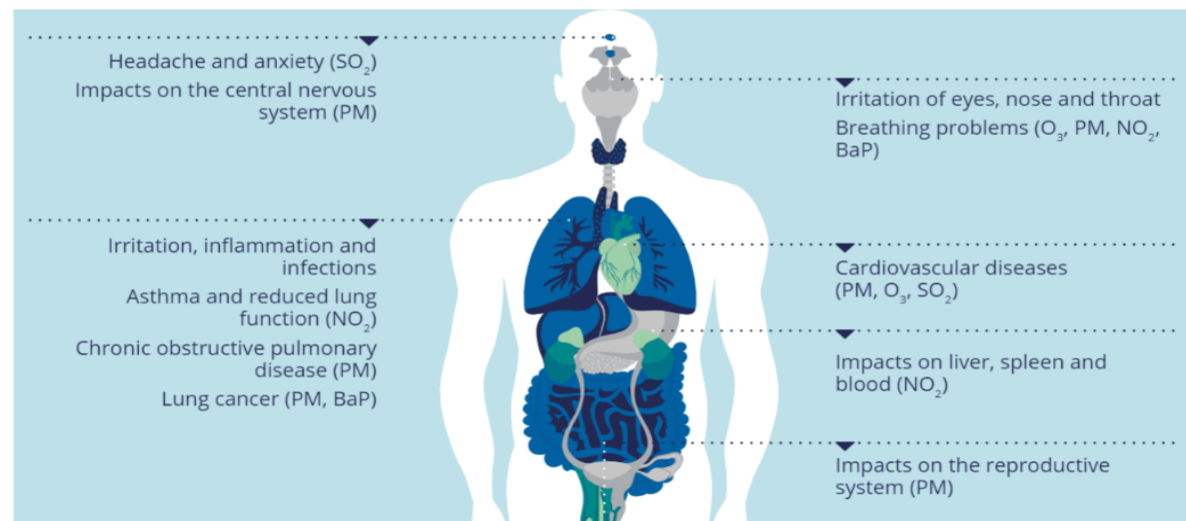


Death rates from fossil fuels and biomass are based on state-of-the-art plants with pollution controls in Europe, and are based on older models of the impacts of air pollution on health. This means these death rates are likely to be very conservative. For further discussion, see our article: [OurWorldinData.org/safest-sources-of-energy](https://ourworldindata.org/safest-sources-of-energy). Electricity shares are given for 2021.
Data sources: Markandya & Wilkinson (2007); UNSCEAR (2008; 2018); Sovacool et al. (2016); IPCC AR5 (2014); Peñal et al. (2017); Ember Energy (2021).
OurWorldinData.org - Research and data to make progress against the world's largest problems. Licensed under CC-BY by the authors Hannah Ritchie and Max Roser.

Source

The first way solar power solves health is by replacing the fossil fuels that are the world's leading source of deadly **air pollution**. A [Harvard T.H. Chan study](#) has calculated that **8 million people per year die earlier due to air pollution from fossil fuels**. That means that burning fossil fuels directly hastens *one in five human deaths worldwide*! The population of New York City killed by fossil fuels, every year. That's not even discussing carbon dioxide-related impacts, just all the nasty crap that burning coal, oil, and gas spews into the atmosphere, from **sulfur dioxide** to **particulate matter**. Fossil fuel air pollution is a major cause of **heart disease** and **lung cancer** (two of the biggest causes of death for modern humans) as well as asthma, chronic obstructive pulmonary disease, and a host of other ailments.

Health impacts of air pollution



Note: Particulate matter with a diameter of 2.5 µm or less (PM_{2.5}), particulate matter with a diameter of 10 µm or less (PM₁₀), ozone (O₃), nitrogen dioxide (NO₂), *benzo[a]pyrene* (BaP) and sulphur dioxide (SO₂).

Source: EEA, "Healthy environment, healthy lives," 2019

[Source](#)

All unnecessary. We have a better choice. The change is already happening. When I went to Beijing in January 2026, I saw clear blue skies. Hundreds of thousands of Chinese people are alive today who would have been dead if their country hadn't pushed so hard to cut fossil fuel pollution and deploy renewables. The U.S. and Europe had already made substantial progress on air pollution reduction by the dawn of the solar age, but there's still lots of opportunity to improve — for example by switching to EVs and shutting down those last coal and gas plants!

Deep breath

Average annual PM2.5 air pollution levels in Beijing, China between 2012 and 2022, in micrograms per cubic meter.

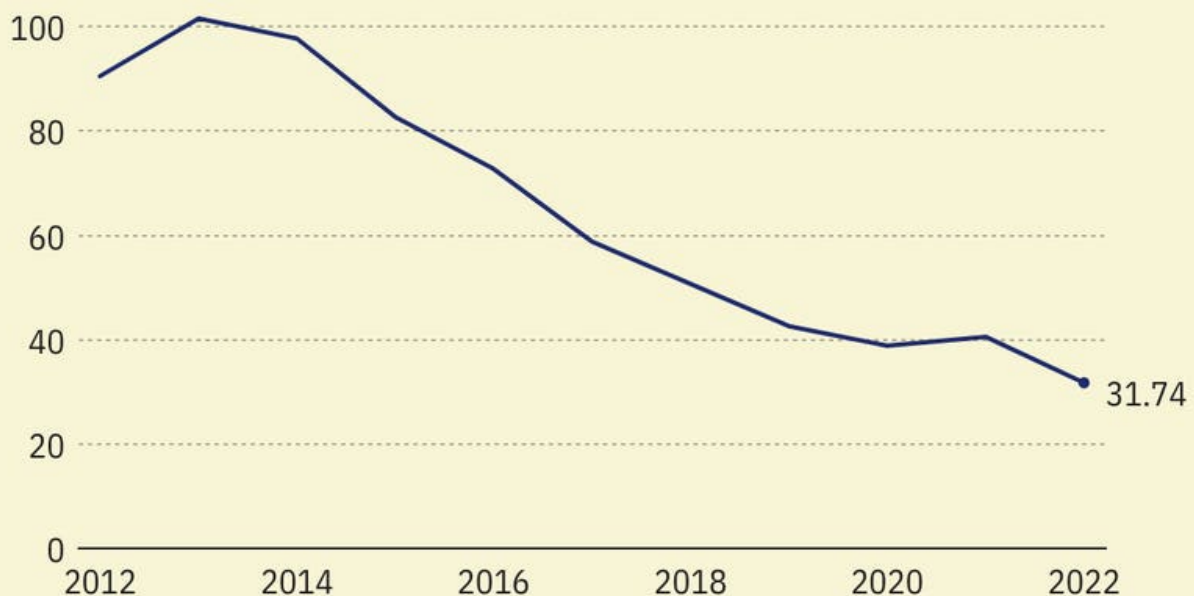


Chart: Jenna Moon/Semafor • Source: US Department of State



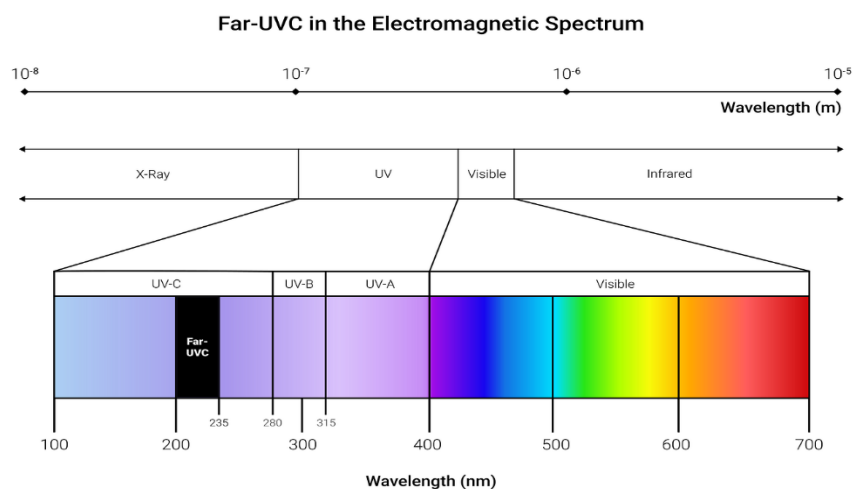
[Source.](#)

The second way solar power solves health is through its fundamentally decentralized and resilient nature, a massive boon for healthcare accessibility that is particularly apparent in the vital **cold chain**. A lot of life-saving medical products, from vaccines to blood transfusions, need to be kept cold in fridges right up until their use. In underdeveloped tropical parts of the world, like sub-Saharan Africa, communities without a stable 24/7 grid connection (many millions of people) essentially had no chance at getting the basic healthcare the rich world takes for granted, because there was no way that their tiny village clinic (if they even had one!) could consistently keep a fridge running without any blackouts spoiling the supplies.



[An Aptech solar-and-battery system powering oxygen production at Mendefera Hospital in Eritrea.](#)

That's now changing fast thanks to the solar revolution! And there are entire new paradigms of healthcare now possible due to electrotech, like Rwanda's amazing medical drone delivery base [that I visited in April 2026](#). That's possible thanks to batteries, and solar is making it ever cheaper and easier to charge those batteries! The life-saving benefits of modern medicine are rapidly becoming available to the world's poorest people, thanks to solar power.



[Source.](#)

But wait, that's not all! As with cellular agriculture for food, there are also some fascinating early signs of a potential extra additional future solar-powered revolution in the field of health. Scientists have [recently found](#) that a very specific wavelength of **far-UVC light**, around 200 to 235 nanometers, kills lots of bacteria and viruses while having little to no negative impact on human health — not even the sunburn you get from the UVB part of the UV spectrum. If you install a specialized lamp producing far-UVC light, it basically [constantly disinfects](#) everything the light touches.

We probably still want to minimize exposure, but even a few walk-through light booths at the entrance to key infection-transmission areas like hospitals, schools, and public transport stations could revolutionize public health, maybe even to the level of preventing the next pandemic or ending transmission of the common cold if it gets widespread enough. That's the kind of widespread additional beneficial electricity use that would be relatively to easy to implement in a solar-powered civilization!

Solar Solves Biodiversity Loss



AFP / Getty

This photo, taken on April 5, 2025, shows a herd of Père David's deer crossing a river past solar panels in a nature reserve in Yancheng, Jiangsu province, China.

[A nature reserve in China. Source.](#)

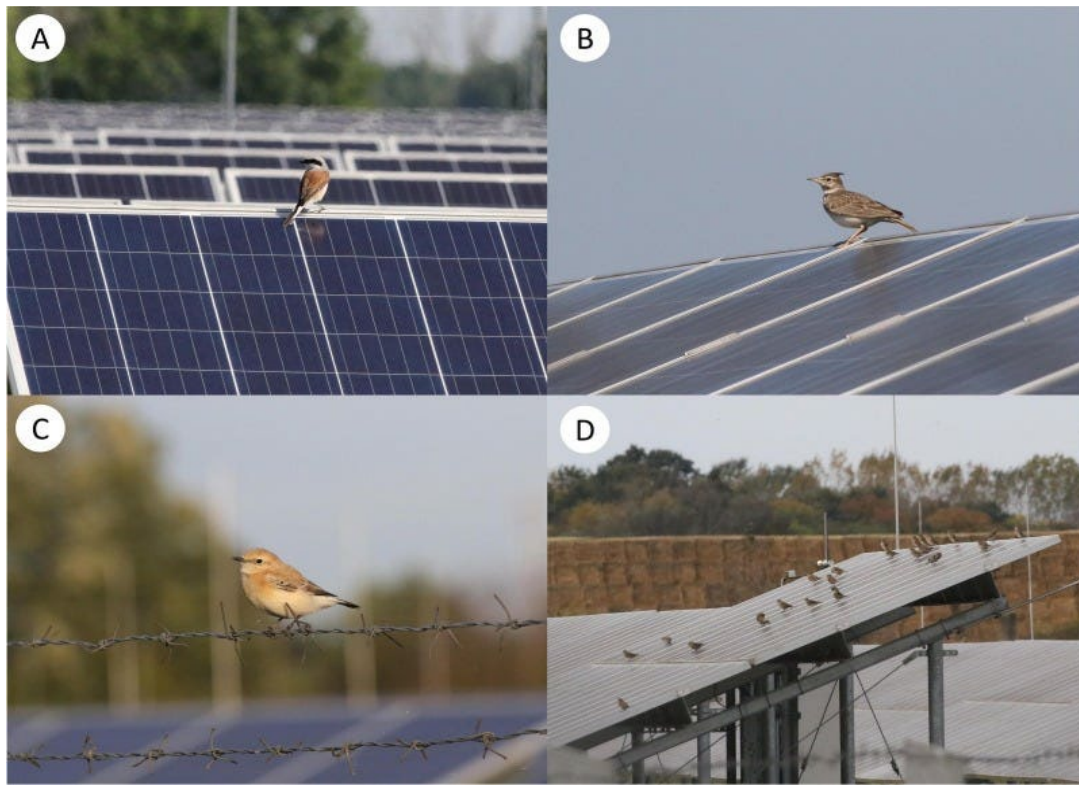
Solar solves biodiversity loss because it is a highly economically productive land use that is eminently compatible with wildlife habitation. A solar panel is, after all, just a thing, sitting there, like a Platonic solid. Photons knocking electrons off silicon. No moving parts, no emissions, no pollution going out to soil, water, or air. Over and over, studies around the world are finding that many wildlife species simply don't mind solar panels, and if the land under and around them is sown with wildflowers or just left alone it can become prime bird and small mammal habitat, as studies have found recently from the UK to the U.S. Midwest!



A solar park built on rewetted peatland hosts a more diverse bird community than adjacent drained farmland, new research suggests. Credit: [Wattmanufactur, CC BY](#)

[Source.](#)

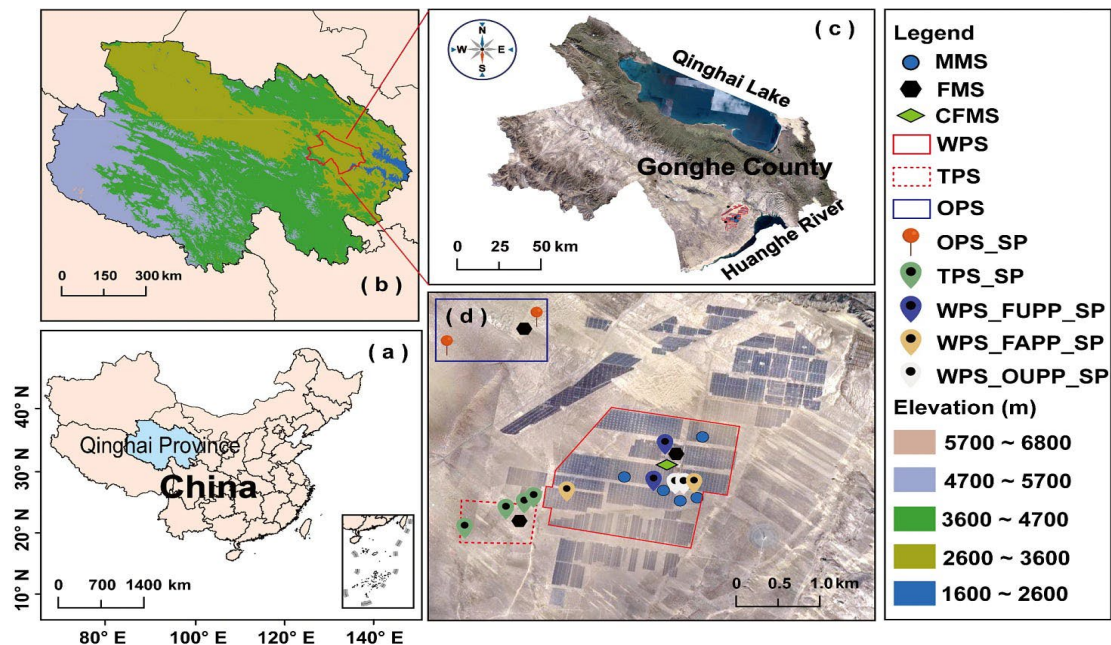
Solar farms are immensely better for wildlife than high-intensity industrial cropland pretty much everywhere. Study after study keeps finding **more biodiversity on solar farms than on the adjacent farmland!** Replacing crop growing with solar farms (which currently take up less space than golf courses and *much* less space than wasteful ethanol cropland in America today!) is a huge benefit to wildlife. It provides classic grassland habitat in exactly the way that modern high-intensity farming doesn't. There's no more plowing or pesticides! It's a de-facto nature sanctuary that pays for itself.



[Source.](#)

These benefits aren't just on land. The fast-growing field of floating solar, in addition to conserving water by reducing evaporation, often becomes a new perching ground for waterbirds!

Furthermore, in deserts and dry grasslands, we're increasingly learning that adding solar panels actively benefits the wild ecosystem!



[Source.](#)

An [in-depth new study](#) at the giant 1 GW (1,000 MW) **Gonghe** solar park in **Qinghai** Province, **China**, has [found](#) that the presence of solar panels had multifaceted positive effects on the local arid desert ecosystem. The solar panels provide shade and a windbreak, allowing more moisture to accumulate in the soil below, and the researchers found that **the area under the solar panels had higher plant diversity, plant biomass, and microbial diversity than the surrounding desert!**

“Photovoltaic development has primarily induced positive effects on the region’s microclimate, physical and chemical properties of the soil, and diversity of the plant and microbial communities, as supported by recent findings.”

[-Wu et al. 2024, Nature Scientific Reports](#)

As solar farms spread, we’re seeing similar findings around the world. A recent [study from Arizona State University has found](#) that the cool shade of solar panels can [serve as a growth-enhancing “nursery”](#) for [small American desert plants and “biocrust” species](#) like mosses, lichen and cyanobacteria.

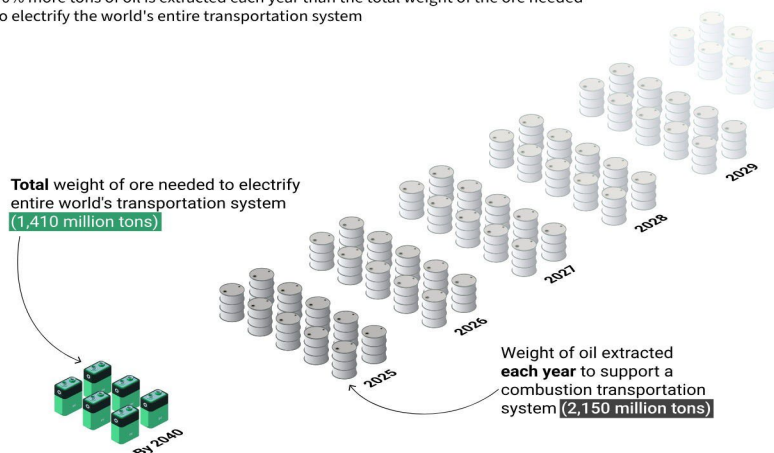
It’s starting to look like building large-scale solar farms in arid deserts is not, in fact, an ecological tradeoff - it’s a win-win! Shade and a windbreak, again, doing their thing! It’s a way of generating energy that is **SIMULTANEOUSLY A FORM OF CLIMATE-RESILIENT ECOSYSTEM CONSERVATION!** It’s the freaking apotheosis of the environmental movement, a self-sustaining incentive package to help the drier parts of Earth survive the Anthropocene.

Solar Solves Mining and Waste

Solar solves mining and waste because **an electrotech economy lives more lightly on the Earth than a fossil fuel economy**. Not only in the metaphorical way, preventing massive global harms like toxic air pollution, in the very literal pounds/kilograms way.

Total battery mineral ore needed to sustain EVs vs. oil extracted each year for non-electric vehicles

40% more tons of oil is extracted each year than the total weight of the ore needed to electrify the world’s entire transportation system



WOW! [Source](#).

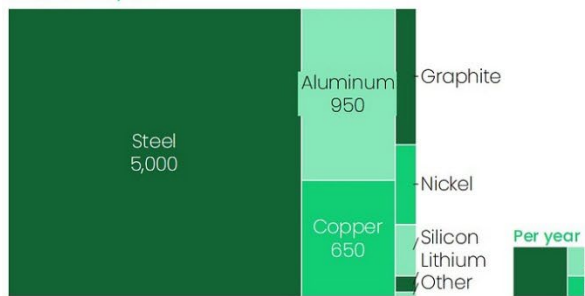
The total weight of the ore needed to electrify the entire world's current transport system by 2040, all those critical battery minerals you hear about, all the lithium and manganese and rare earth elements, adds up to about **1.410 million tons**. That's a lot. But the weight of the oil extracted *each year* to support our current fossil-fueled transportation is about **2.150 million tons**! This is just transport, but the same relationship holds for all of our civilization. It makes sense when you think about it - fossil fuels get burned, but solar panel and battery minerals stay in use for decades and can then be recycled!

The unbearable heaviness of the fossil fuel system

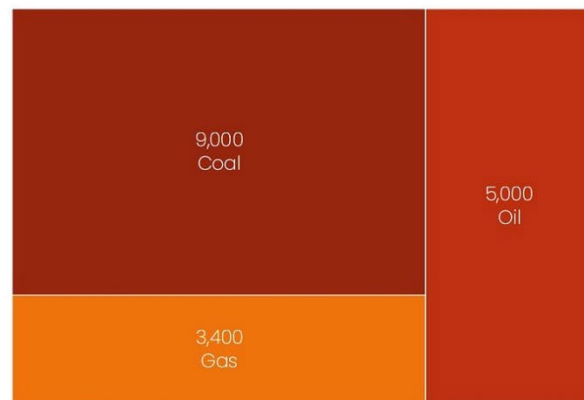
The fossil fuel system requires over 50x more materials than electrotech

Total material demand for the energy transition for 25 years (2024-2050), Million metric tons

Total over 25 years



Fossil fuel extraction *per year today*, Million metric tons



[From Ember's 2025 "The Electrotech Revolution" slide deck!](#)

As highlighted in the exciting research of [Dr. Hannah Ritchie](#) and the [Rocky Mountain Institute](#), we're also learning that clean energy technologies hit a waste-reduction trifecta. In comparison to fossil fuels, they **require orders of magnitude less mining** (because they're not burning fuel!), produce **much less end-of-life waste**, and are increasingly **hyper-recyclable**, to the extent that it might someday be possible to create a "Battery Mineral Loop," where after a one-time mining investment, critical minerals could just keep getting recycled between ever-improving generations of tech.

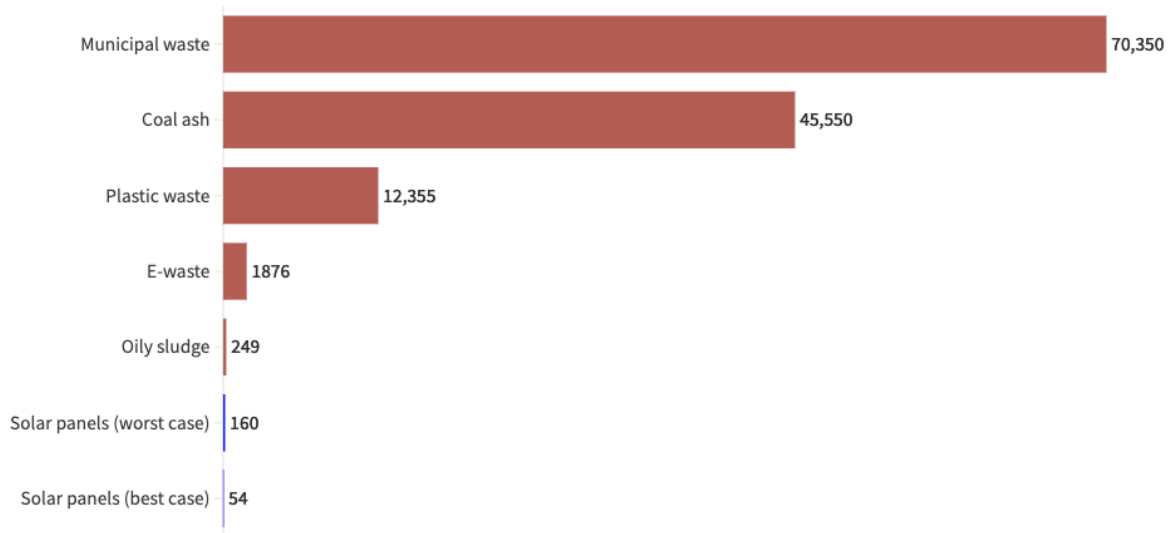
[The Battery Mineral Loop](#)

[How much waste do solar panels and wind turbines produce?](#)

I get why many people oppose battery mineral mines near them, I really do. And in some places, like Sulawesi in Indonesia, rapid proliferation has caused genuinely bad environmental harm. But in the global scheme of things, each battery mineral mine is also a sort of anti-mine, an investment in a civilizational future with much, much less mining needed.

Cumulative waste generated by 2050

Projected cumulative waste generated between 2016 and 2020, measured in millions of tonnes.



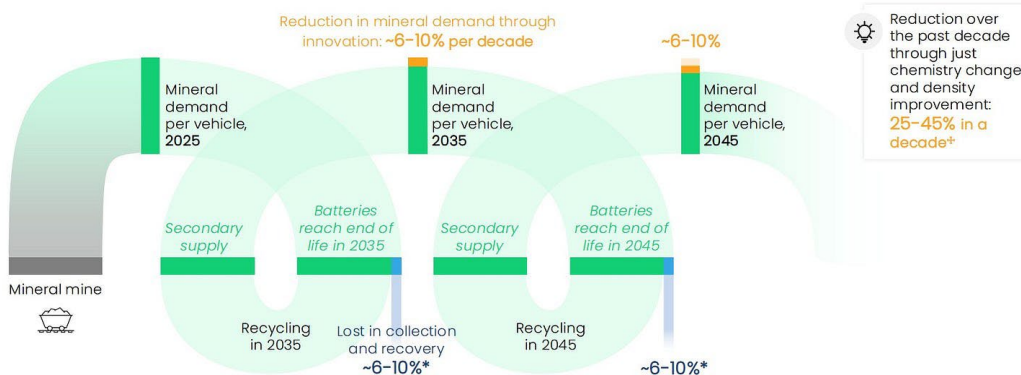
Data Source: Mirlatz et al. (2023). Unfounded concerns about photovoltaic module toxicity and waste are slowing decarbonization. Nature Physics.

Source.

And much less waste! Total “used solar panel” waste by 2050 is [on track](#) to add up to **less than one percent as much mass** than **coal ash** waste! End-of-life solar, wind, and battery waste is generally highly recyclable, and even if it wasn’t and was all destined for a landfill (implausible in the extreme), the fact that clean energy minerals stay in use for twenty years straight instead of being burned up for fuel means that their waste would still be positively tiny and harmless in comparison to the vast and constantly growing piles of toxic coal ash already sickening some of America’s and the world’s poorest and vulnerable communities!

Borrowing, not burning

If you recycle batteries and improve performance, you don’t need to extract new minerals



50 | Sources: RMI • Notes: Useful battery lifetime of a decade is indicative; lifetimes are likely longer. * Accelerated case + About 25% for lithium, about 50% or more for nickel and cobalt

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[From Ember’s 2025 “The Electrotech Revolution” slide deck!](#)



It is very difficult to set up a coal plant or oil refinery in your backyard or on your roof. But you can set up solar panels and battery storage anywhere, in any size, in any configuration, and then power your entire life with them, from an electric car to an induction cooktop. Whatever the worst threats to peace and freedom in the future may be - mass AI surveillance and cyberattacks, drone swarm attacks by terrorists or rogue states, climate-supercharged mega-storms, a nuclear exchange, bioengineered pandemics, something we can't even conceive of yet – having widespread, decentralized solar and battery power will help people survive and resist it.

No matter what scary menace arrives in the future, it's always going to be relatively easy to stop the operations of a single centralized coal or gas plant, with a single explosive strike or workplace infection or cooling water shortage. It will always be much, much harder to shut down electricity generation across tens of thousands of households with their own self-sufficient clean power plants. Even centralized grid-scale solar farms are much harder to destroy! As recent wars have proven, you can smash some panels, but the rest keep working and more can be installed quickly, unlike the complex, flammable fossil fuel plants where one *boom* kills the whole thing.



[Australia installed nearly 3 GW \(3,000 MW\) of new rooftop solar in 2024, bringing the total to over 25 GW.](#)

Decentralized solar fundamentally makes human civilization in its entirety a more resilient, less fragile entity, giving ordinary households the benefits of key modern technologies with an unprecedented degree of security and ownership over the power supply that makes those

technologies function. We're already seeing this, over and over, around the world, with solar creating islands of resilience after climate-supercharged mega-storms from [Jamaica](#) to [Malawi](#).

Perhaps the most extreme test case so far is in Ukraine, where solar/battery microgrids are increasingly keeping hospitals and schools running despite constant brutal and deadly Russian missile attacks against civilians. A few recent solarization projects include the [Odesa Perinatal Center](#) (which saved 62 children's lives in Jan-Mar 2026 alone!), [a heart surgery center in Kropyvnytskyi](#), [an eye surgery center in Mykolaiv](#), [a maternity hospital in Cherkasy City](#), and [the Borodianka Lyceum](#). Ukraine is at the forefront of building deep societal resilience with electrotech.

War and tyranny have obviously been around since long before humanity started to use fossil fuels at scale. Solar can't solve the problems of senseless inter-ethnic hatred, bitter religious schisms, greed, stupidity, or sheer lust for power. But it can radically reshape the underlying architecture of civilization in a manner that surgically removes one of the primary enablers of, and incentives for, violence and tyranny today.

Solar Solves Climate Change

Oh, and solar power (plus batteries) also replaces almost all uses of the fossil fuel-burning technology producing the anthropogenic greenhouse gas emissions that are cooking the planet. Just in case we need another reason.

Article link: https://climateactapp.substack.com/p/solar-solves-everything?utm_source=substack&publication_id=2693993&post_id=212192510&utm_medium=email&utm_content=share&utm_campaign=email-share&triggerShare=true&isFreemail=true&r=l54e2&triedRedirect=true