

Solar farms on farmland instead of growing corn for ethanol

Thanks to Mary from RAFT (an environmental group in Tioga County/Owego area), here's some more excellent information on how putting solar farms on farmland instead of growing corn for ethanol would be more than 30 times better in providing energy, reduce fertilizer runoff, and allow planting native plants such as wildflowers that would help pollinators, as well as other benefits!

Excerpts followed by source link:

'Solar energy expansion is often viewed as a threat to US food security. And yet roughly 12 million hectares of US farmland—an area the size of New York State—is currently devoted to corn crops that are farmed not for food, but for fuel.

In a new [PNAS study](#), researchers ask a provocative question: why not transition some of this corn-for-ethanol farmland to significantly more efficient solar energy production instead? They find that populating just a tiny percentage of that land with solar panels would dramatically increase the US's solar energy output, while also relieving significant ecological pressures on the land.' ...

'The researchers then went further, showing that if farmers took a bold leap and covered 46% of land currently used to farm ethanol with solar panels, that would then generate enough energy to reach the 2050 decarbonization goal for the US.

The comparison shows the much lower efficiency of growing corn for energy, [compared to solar production](#). In fact the study says that it would require about 31 hectares of corn ethanol to produce the same amount of energy generated by one hectare of land covered in solar panels.

This raised some interesting questions about the amount of resources that are poured into farming corn. The researchers found that replacing crops with panels on just 3.2% of farmland would reduce the use of nitrogen and phosphorus fertilizer by about 54.8 million kg and 26.3 million kg, respectively. It would also reduce the need for irrigation across this terrain. What's more, the land beneath solar panels can be planted with perennials and wildflowers that can help to stabilize soils and reduce run-off, sequester carbon, and diversify farmland with pollinator-friendly plants.'

Storage – Reuters-power outage in Spain

While it may be tempting to blame the power outage that hit the Iberian peninsula this week on the rapid growth of wind and solar power in Spain, reliance on renewables is not to blame. Rather, the issue appears to be the management of renewables in the modern grid. The [massive blackout](#) on Monday – the biggest in Europe's history – should be a stark warning to governments: investments in power storage and grid upgrades must go hand in hand with the expansion of renewables generation.