

Small-scale solar energy in the wild



Overview

Does solar energy affect wildlife?

This limited information indicates that the effects of solar energy development on wildlife are generally negative, primarily due to the destruction and modification of wildlife habitats and bird mortality (DeVault et al., 2014, Kagan et al., 2014, Visser et al., 2019).

Do solar energy plants affect fauna?

Renewable energy sources include solar energy plants (PV), however research on the effects of utility-scale plants on fauna has been limited. Most studies have focused on extensive PV in natural habitats like savanna or deserts, so these studies are not directly applicable to European contexts where many PV are placed in farmland.

Do solar energy plants reduce bird mortality?

However, it is already well-established that bird mortality at solar energy facilities is the lowest compared to fossil fuel-based plants and other renewable energy sources. Some findings even suggest that photovoltaic installations may have a positive impact on biodiversity compared to other technogenically altered landscapes.

Are solar energy plants a viable alternative energy source?

The increasing demand for energy, coupled with the imperative to curtail the combustion of natural raw materials and mitigate global warming, necessitates the exploitation of alternative energy sources. Renewable energy sources include solar energy plants (PV), however research on the effects of utility-scale plants on fauna has been limited.

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Literature Cited This document contains a full list of the primary sources referenced in the Renewable Energy Wildlife Institute's Solar Energy Interactions with Wildlife ...

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Keywords: utility-scale solar energy, ecological dichotomies, vegetation greenness, scale effect, arid regions Citation: Xiao J, He P, Li ...

From a small California winery to a large-scale energy project in China, floating photovoltaics -- or "floatovoltaics"-- are gaining in popularity. Commonly installed over ...

How might floating solar energy projects impact wild birds and vice versa? A paper outlines key considerations for a growing floating solar industry. From a small California winery ...

Turning Habitats into Wildlife Sanctuaries and Energy Producers There may be concerns that solar panels use space that could be inhabited by wildlife. But, if designed ...

Methods We searched the UK Government's Renewable Energy Planning Database (DESNZ 2023) to identify utility scale photovoltaic (PV) solar farms in The Fens. We ...

Keywords: utility-scale solar energy, ecological dichotomies, vegetation greenness, scale effect, arid regions Citation: Xiao J, He P, Li Y, Shi M, Li Y and Ma J (2025) Ecological ...

Can small-scale solar farms deliver green energy? A worker lifts a solar panel to the roof

of a home in Frankfort, Ky. Small-scale solar infrastructure can deliver green energy at a fraction of ...

Utility-scale solar energy (USSE), in particular, could affect landscape-scale habitat connectivity by directly altering habitat with solar panels or restricting wildlife movement due to fencing and ...

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