Renewables in Spain threaten biodiversity

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Reducing greenhouse gas emissions is a global priority. To meet this goal, the Spanish government is planning 89 GW of wind and solar photovoltaic energy in the draft of the National Integrated Energy and Climate Plan (PNIEC) for 2021–2030. Despite the Spanish government's efforts to prevent a speculative bubble in the secondary market, there are already grid access permits for projects representing 121 GW that will be added to the 36 GW of renewables already installed, almost doubling the goals of the PNIEC. The new projects will affect hundreds of thousands of hectares, and there is no way to offset the huge quantity of valuable habitats that could be lost. Spain should adopt a more cautious approach to prevent a scenario in which energy goals are met at the expense of biodiversity. Many renewables projects are planned in low-cost marginal soils of high ecological value, such as extensive cereal farmlands and wild mountain ranges harboring steppe birds and raptors that have in Spain their largest European or world populations. Photovoltaic energy needs huge amounts of land and will mostly affect declining species of steppe birds, which are poorly represented in the Spanish Natura 2000 network. Globally threatened large scavengers and other unique and scarce soaring birds are already paying a heavy toll due to the approximately 20,000 existing turbines, with demographic consequences for some threatened populations. Bat-killing figures are even higher, with a minimum of 200,000 deaths per year according to estimated mortality rates. Studies forecasting mortality have shown scarce predictive power, and when mortality hotspots are detected, conflictive turbines are virtually never stopped to reduce bat and bird casualties as recommended. As a large-scale approach, the best way to reduce impacts is by choosing adequate locations. However, updated field information necessary to achieve this goal is often not available, and projects are authorized in areas with under-protected species because their status within regional and state listings is frequently outdated. Studies designed to predict and monitor the incidence of renewable infrastructures are funded by energy companies, often with little supervision by governments, which precludes independence. The problem is exacerbated by the fragmentation of large projects (yielding reports of the smaller impacts associated with each part rather than a comprehensive assessment of the full project), the absence of an in-depth assessment of cumulative and synergistic environmental impacts, and decentralized administrative authority divided among the central state, regions, and municipalities. We welcome renewables, but we urge Spanish authorities to correct these deficiencies and implement rigorous comprehensive planning based on the most updated ecological knowledge. We also call for a stronger commitment to more distributed and energy-saving policies that would reduce direct environmental impacts on biodiversity, such as energy efficiency, self-consumption, and improved energy performance in buildings.