



Ghana Wildlife Society Position Statement

on

The Impact of Solar Power on Birds in Ghana

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The Ghana Wildlife Society is a non-governmental, non-political and non-profit making conservation organization. We have been at the forefront of nature conservation for the past three decades. Our mission is to conserve wildlife in all its forms to ensure a better environment and for improved quality of life for all people. We belong to BirdLife International partnership, the world's largest nature conservation network of 121 autonomous NGOs around the world. We operate based on the model that stipulates that conservation actions must hinge on credible scientific evidence.

Our work over the past three decades has transformed corporate industrial practices and national policy, including the ban on trade in Grey Parrots and provision of models for community ecotourism initiatives in Ghana (e.g. Nzulezu and Afadjato). Our past and present nature conservation campaigns have contributed to the reduction of indiscriminate killing of bats in the Accra Metropolis and other parts of the Country. Through several research activities, we have contributed scientific data to various national policy processes. We promote conservation education in schools and the general public through Wildlife Clubs of Ghana and other means.

Introduction

Solar power facilities use an array of flat, movable mirrors (heliostats) to generate power by focusing the sun rays upon a collector tower. Solar power facilities can produce reliable clean energy, and usually include energy storage which means power can be released to the grid when the sun is not shining. However, Solar power facilities can pose potentially significant threats to birds, including injury or mortality through collision with heliostats; collision and electrocution by associated powerlines; burning if birds fly through concentrated areas of solar energy (solar flux), and through destroying or degrading their habitats and displacing or disturbing sensitive species.

GWS Position

Ghana Wildlife Society supports the responsible development of solar power facilities. We recognise the need to generate power that is clean and does not contribute to greenhouse gas emissions. At the same time, we acknowledge that solar power tower facilities could be hazardous to birds and their habitats. GWS position is aligned to Resolutions and Guidelines adopted in Multilateral Environmental Agreements which recognises the need to ensure that renewable energy development is developed in harmony with nature. The renewable energy

and biodiversity impacts topic has been raised and considered under several international conventions, notably the Convention on the Conservation of Migratory Species of Wild Animals, the African-Eurasian Migratory Landbird Action Plan and the African-Eurasian Migratory Waterbird Agreement all to which Ghana subscribes.

Avoiding and Mitigating Risks to Birds and their Habitats

Site selection - siting is key to reduce the potential negative impacts of solar power facilities on birds. GWS recommends that developers consult with bird specialists, conservation NGOs, and government officials in the early stages of planning, to help identify suitable areas for development. Solar power facilities should be located outside Protected Areas, Important Bird and Biodiversity Areas and other important nesting, roosting and foraging sites of nationally threatened, endemic or near-endemic and migratory bird species.

Environmental Assessment - GWS encourages the use of environmental assessment tools, such as Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA), to map out potential impact areas to biodiversity at the strategic and site-specific levels respectively. If the large-scale development of solar power facilities becomes a priority for Ghana, GWS recommends that a Strategic Environmental Assessment (SEA) is undertaken to assess the opportunities and risks, including cumulative risks, for the region. Site-specific Environmental Impact Assessment (EIA) is necessary to ensure potential impacts are understood and options for mitigation and monitoring are identified. EIAs for solar power facilities must include an avifaunal impact assessment that is conducted by a qualified and experienced avifaunal specialist, and informed by the latest international literature and guidelines. Surveys should be timed to ensure the full annual cycle is and must include the wet and dry season.

Applications to amend and/or renew of environmental authorisations for solar power facilities must include an assessment by a bird specialist to determine if the receiving environment has changed, and to revisit, and if necessary update, the mitigation strategy. If significant impacts on birds are recorded, voluntarily mitigation should be implemented. The effectiveness of this mitigation must be monitored and if necessary, the Environmental Management Programme updated.

Mitigation hierarchy – GWS strongly recommends that the mitigation hierarchy be fully applied in renewable energy programmes and projects if such development is to achieve an adequate level of sustainability in the country. High-risk sites or routes should be avoided while biodiversity offset measures should only be considered if it has been demonstrated that there are no feasible alternatives available.

Call for action

Ghana Wildlife Society (GWS) believes that renewable sources are important and in producing sustainable power in Ghana, but if biodiversity considerations are adequately integrated into the Planning, Generation, Transmission and Distribution of power. We, therefore, call for the following considerations going forward:

- 1) That the economic concerns of power projects must not override biodiversity but must be an integral component at the project conception through to implementation;
- 2) Application of strategic planning tools (such as SEA, sensitivity maps) are important in averting conflicts between the renewable sector and biodiversity conservation: we *urgently* call upon the relevant government agencies, energy developers, financiers and other stakeholders to employ such tools so that early-stage planning decisions are taken with the best available information;
- 3) National legislation and policies, such as the Renewable Energy Act, 2011 (Act 832); the Environmental Assessment Regulations, 1999 (L.I. 1652); the EIA Guideline for the Energy Sector; the National Energy Policy; and the Strategic National Energy Plan (2006-2020), should be updated and enforced ensuring transparency while taking into account other regional and international obligations that Ghana has committed to supporting a truly green and renewable energy sector development for the country;
- 4) GWS calls upon stakeholders {including the Environmental Protection Agency, the Ministry of Energy, the Energy Commission of Ghana, Ghana Grid Company Limited (GRIDCo)} in the energy and conservation sectors to initiate a national dialogue to develop national standards to guide renewable energy sector development and infrastructure that is in line with biodiversity conservation requirements;
- 5) The need for more research and monitoring, in consultation with relevant experts, to improve our understanding of the impacts of energy infrastructure on birds and biodiversity.

Given the above, GWS will continue to offer herself and engage constructively with relevant stakeholders to mainstream biodiversity objectives into development planning, policy/legislation making and implementation and deployment of energy programmes and projects.