

## Leading expertise in managing biodiversity risks and impacts in the Renewable Energy sector

### Who we are

The Biodiversity Consultancy (TBC) is a **specialist consultancy in biodiversity risk management**. We provide the expertise needed to manage biodiversity and ecosystem service risks throughout the project cycle. We work with businesses and financiers to identify risks and develop pragmatic solutions that are aligned with international best practice.

We are **leaders in the interpretation and application of international finance safeguards** including IFC Performance Standard 6 (PS6) and World Bank Environmental and Social Standard 6 (ESS6). We use our extensive international experience to work with leading renewable energy businesses to align with these standards.

Our expertise is applied across the **hydropower, solar, wind, and geothermal sectors**, including their associated power infrastructure. We help deliver bankable projects that result in positive biodiversity outcomes on the ground. Our **proven track record** is a testament of our success, and has established us as the **strategic partner of choice** for addressing risks and opportunities at national, regional, and international scales.

### Our core services

Strategic Assessments

Biodiversity Risk Screening

Biodiversity Strategy

Technical support to ESIA's

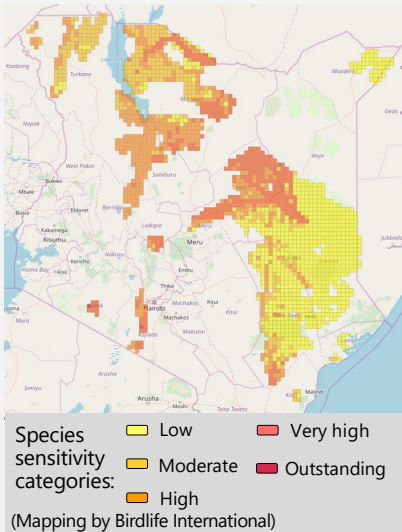
Biodiversity Action Plans /  
Management Plans

Biodiversity Offset Design,  
Implementation & Evaluation

Technical Implementation &  
Support & Capacity Building

Biodiversity Monitoring  
Design & Implementation

# Selected projects - Strategic assessments



## Strategic Assessment, Kenya

TBC led a Strategic Environmental Assessment (SEA) for wind power and biodiversity for USAID's Power Africa Transactions and Reform Programme and the Kenya Ministry of Energy, in partnership with the Kenya Bird Conservation Consortium.

We co-ordinated and provided technical leadership to identify and collate data on the highest priority biodiversity features, carry out field surveys to fill information gaps, analyse policy and wind power plans, carry out sensitivity mapping, and work with government and industry stakeholders to build capacity and ensure the SEA results are used.

This SEA serves as one of the first ever studies in Africa focused on assessing biodiversity-related impacts of wind energy at a national level.

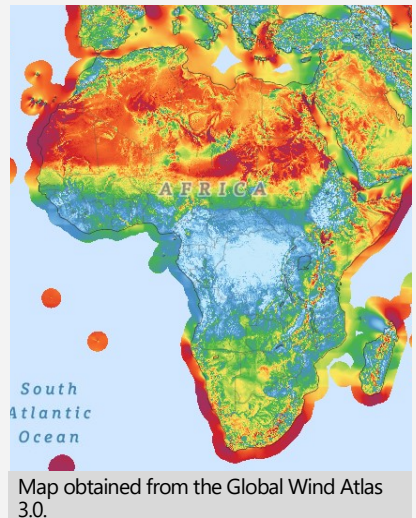
*This showed large areas of economic wind potential in Kenya where biodiversity risks are likely low or manageable.*

## Strategic Assessment, Ethiopia

TBC led on the biodiversity component of a SEA for wind and solar power for Ethiopia on behalf of the World Bank Group. Working closely with in-country stakeholders, nine proposed wind farm sites were assessed for biodiversity sensitivity, including potential triggers for Critical Habitat as defined by IFC PS6.

In a second phase of work, TBC developed sensitivity mapping to indicate areas of highest sensitivity to migratory birds, vultures and bats. This work will help the government and future project developers understand risks and identify suitable areas for wind and solar projects.

*Publicly available data on wind power potential formed the basis of our analysis to identify suitable development areas.*



# Selected projects - Hydropower and geothermal



*Field surveys in the project vicinity (top) revealed the presence of Critically Endangered Western Chimpanzee (bottom).*

## Bumbuna II hydropower project, Sierra Leone

TBC is supporting the Joule Africa's Bumbuna II hydropower project achieve financial close by aligning with international best practice. Early engagement enabled identification and prioritisation of biodiversity risks and focal field surveys to inform a Critical Habitat Assessment and mitigation plan. A PS6-aligned Biodiversity Action Plan is supported by a residual impact assessment and offset strategy demonstrating how the project will achieve net gains for priority biodiversity.

Through a tailored collaborative approach, TBC developed terrestrial and freshwater offset actions for sensitive species and habitats including the Western Chimpanzee and hillslope forests.

## Hydropower project, Malawi

TBC is supporting a large-scale hydropower project in Malawi to align with PS6. We work closely with the project developer, lenders and their partners to develop biodiversity mitigation measures in line with good international industry practice.

Through early risk screening, TBC supported the conceptualisation of a regulating dam to mitigate downstream peaking impacts, while ensuring it was sited away from a protected area of global conservation significance.



## Geothermal project, West Indonesia

TBC supported a major geothermal exploration project in West Indonesia to align with PS6. This involved undertaking an Ecosystem Services Review, Critical Habitat Assessment, a review of potential residual impacts, investigation of onsite restoration and offset options, and the development of an offset strategy.

TBC's work helped the company understand their risks to biodiversity & ecosystem services which allowed them to prioritise urgent actions and address public concerns.

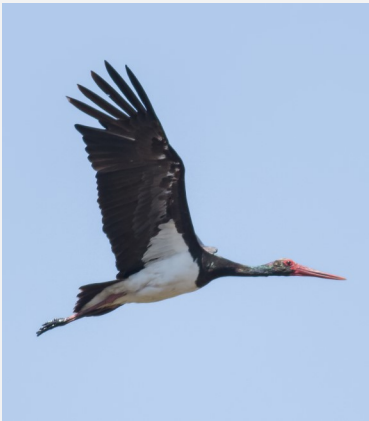
# Selected projects - Wind and solar power

## Kipeto Wind farm, Kenya

TBC played a critical supporting role in bringing Kenya's second-largest wind farm to financial close in 2018. We were instrumental in helping the project align with PS6 for Critically Endangered vultures. This involved undertaking a Net Gain feasibility assessment, including collision risk modelling, residual impact assessment and offsets options analysis, field surveys, and developing a Biodiversity Action Plan. We have also coordinated national NGOs to develop offset actions.



Our efforts in assisting the project's biodiversity risk management program and stakeholder engagement process have been recognised internationally and reported in [the Financial Times](#) and [Medium](#).



## West Bakr Wind project, Egypt

TBC worked with Lekela Energy to support the West Bakr Wind project to manage risks to migratory soaring birds and other biodiversity. The project is situated along the Gulf of Suez, the focal region for wind farm development in Egypt, where approximately two million migratory soaring birds fly through each year, and is a bottleneck on the Rift Valley/Red Sea Flyway.

TBC produced a [Critical Habitat Assessment](#) to align with PS6 and EBRD Performance Requirement 6, and an [analysis of potential cumulative effects](#) on biodiversity.

## Solar PV farm, Ukraine

TBC undertook a biodiversity risk screening during the project's early planning phase, enabling the infrastructure design to avoid and minimise impacts to high-risk species.

Early identification of biodiversity risks, which included a sub-surface ground dwelling mammal and several plant species, focused field survey effort and provided information to support alignment with international lender requirements.



# Our Capabilities

## Expertise across renewable sectors

- Strategic and pragmatic biodiversity risk management support in Africa, Asia, Europe and Latin America.
- Development of national strategic assessments.
- Support large-scale renewable energy developers in emerging markets to overcome challenges, avoid delays, reduce costs, build staff capacity, and provide a positive basis for working with stakeholders.

## Leaders in the application of international lender standards

- Over ten years' company experience applying IFC PS6, and other leading international lender safeguards across all major industry sectors including renewable energy, infrastructure, agribusiness, mining, oil and gas, and consumer goods.
- Key role in the development and evolution of IFC's and EBRD's biodiversity standards - benchmarks for private sector environmental performance, catalysing major change in biodiversity management.

## Global outreach through local expertise

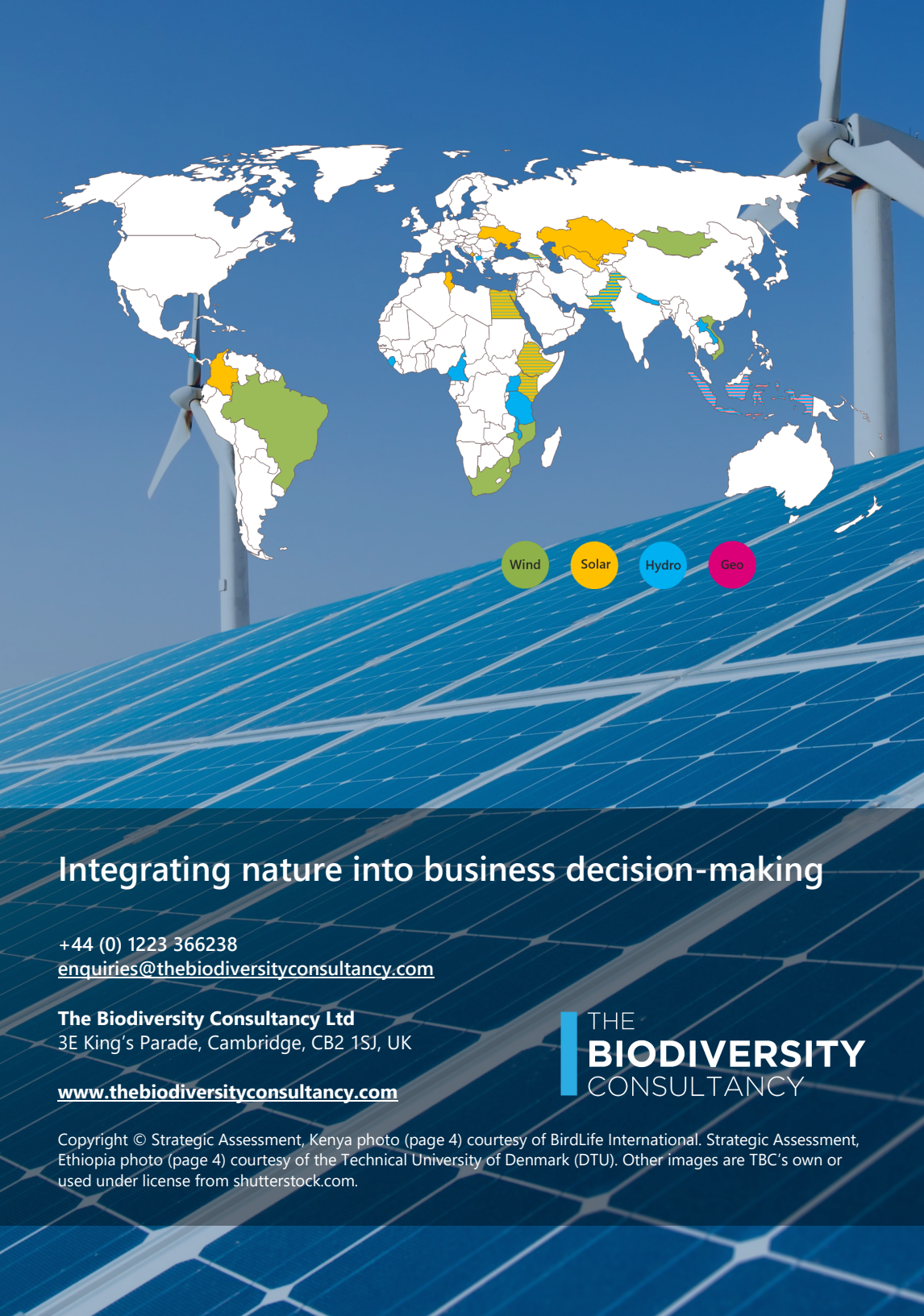
- An in-house team of international experts with first-hand experience in managing biodiversity and ecosystem service issues specific to hydropower, solar, wind, and geothermal developments.
- Collaborations with specialist field experts including ornithologists, botanists, fish biologists, and hydrologists help our clients understand biodiversity sensitivities and monitor mitigation measures to ensure alignment with global best practice.

## Biodiversity offset specialists

- Global thought and practice leader in biodiversity offsetting and central to the development of this field over the past ten years.
- Demonstrate our thinking by publishing leading academic papers and industry guidance documents.
- Successful development of offsets for wind energy and hydropower developments through a tailored collaborative approach, helping to deliver net positive outcomes for biodiversity.

## Global collaborative network

- Effectively bridge science, civil society, industry, finance, and government.
- Leveraging our strong global network, we develop practical ways forward to align needs and expectations of lenders and stakeholders.
- This enables us to create a common language for cross-sector collaboration on renewable energy projects that recognises the urgency to increase renewable energy generation whilst managing the inherent biodiversity risks.



Wind Solar Hydro Geo

# Integrating nature into business decision-making

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