



**GLOBAL FLYWAYS SUMMIT, APRIL 23-26 2018**

# Mainstreaming flyway conservation with wind energy and power transmission sectors

**T**he deployment of renewable energy, such as wind energy or solar power generation, is expanding rapidly, and an increasing number of renewable energy technologies are becoming cost-competitive. Alongside this, the scale and reach of power transmission infrastructure is expanding in order to deliver energy to growing urban centres and remote rural populations. These technologies are playing an important role in the reduction of greenhouse gas emissions and delivering clean energy for all, helping to meet Sustainable Development Goals (SDGs) 13 and 7 respectively.

However, while the potential benefits of renewable energy and improved power transmission are huge, like any other development this can have negative impacts on biodiversity if facilities are not planned and implemented appropriately. For example, poorly-sited wind farms have been shown to have detrimental impacts on birds, particularly migratory soaring birds which make use of wind currents along their flyways.

Wind energy and power transmission infrastructure can lead to impacts including: collision leading to direct mortality; electrocution where pylons are poorly designed; disturbance and displacement from around the turbines or exclusion from the whole wind farm; barriers to movement disrupting ecological links between feeding, wintering, breeding and moulting areas; and change to or loss of habitat due to wind turbines and associated infrastructure.

The Energy session at the Global Flyways Summit explored the issues relating to biodiversity associated with wind energy and power transmission and identified practical solutions for governments, conventions, business and civil society. By bringing together key stakeholders, the session further developed committed alliances to share, support and implement priority actions to accelerate mainstreaming flyway conservation into the wind energy and power transmission sectors.



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## Outcomes

The threats and solutions needed are broadly similar across many migratory species, and the following actions were highlighted as being priorities for migratory bird conservation:

- With global demand for energy forecast to greatly expand by 2035, and with much of this energy coming from renewable sources, it is critical that renewable energy infrastructure is **sited and operated** with biodiversity considerations taken into account.

- **Tools that map sensitive areas** for migratory species (such as BirdLife's Sensitivity Mapping Tool) should be employed as part of robust Strategic Environmental Assessments so that early stage planning decisions are taken with the best available information.

- It is important to emphasise the **business case** for integrating bird (and bat) conservation into renewable energy development. This must be achieved early on and before renewable energy planning decisions are made to secure support from industry and across government (e.g. to reduce risk and lower costs). Industry, government and international financial institutions are more willing to listen and engage positively in finding solutions before and during the planning stage and before irreversible or costly decisions, or political commitments, are made.

- **Stakeholder awareness** and capacity on the need to mainstream migratory species in the (renewable) energy sector must be increased – among energy ministries, investors, project developers, utility companies and donors. This includes **fostering linkages and communication platforms**, ensuring that any additional useful information is readily available and received early on in the planning process.

- There is a need to **communicate** the risks associated with renewable energy developments such as wind turbines on migratory species and to stress the importance of ongoing and further **research**.

- There is an urgent need to develop, collate and communicate relevant and available **tools and guidance** to facilitate the implementation of migratory bird and other biodiversity safeguards for both current and future renewable energy development.

- There is a need to work with the energy sector to help develop **sustainable energy policies and processes** before funds and sites are committed for renewable energy infrastructure development.

- Targeted policies and regulations should be enforced with stronger **compliance mechanisms** and greater power and remit of environmental ministries. Investors want a clear and strong regulatory environment to minimise the risk of investment.

- **Adequate funding** needs to be made available for to support all of the above activities, including research, communication, coordination, capacity building, planning and implementation.

- There is a need to **share data**, on both biodiversity and

development activities, including data from impact assessments and monitoring and experience with the application of mitigation measures, where possible putting it in the public domain.

- For developments already underway or in place, and where significant risks have been identified, technology to **mitigate biodiversity impacts** should be applied, such as the use of radar to detect birds and shutdown on demand for facilities during migration season or at particular times of day, and its long-term effectiveness monitored.

- A **holistic view** is required to include migratory bird safeguards together with an overall package of all environmental considerations that a company has to consider.

- There are a number of **policy entry points**, with a range of stakeholders and in a range of fora, including multilateral environmental agreements and other international policy processes, for mainstreaming and awareness-raising of migratory bird safeguards and solutions.

- **Collaboration** is needed to find common ground and solutions. The multi-stakeholder Convention on Migratory Species (CMS) Energy Task Force, with environment and energy ministries, energy and utility companies, development banks, academia and NGOs amongst its membership, is supporting delivery of several of the above priority actions, and another example is Europe's Renewables Grid Initiative.

- There is an urgent need to **scale-up and build on existing initiatives**, such as the Energy Task Force's work on best practice guidelines, the **Spanish Ornithological Society's** work on Black Vultures and Storks to monitor flight paths and generate collision risk models, and the **UNDP-GEF-funded 11-country** Migratory Soaring Birds Project in the Red Sea/Rift Valley flyway. Building on the examples presented in the plenary and talks, breakout groups explored three thematic priority issues, as follows.

### 1. Next steps for policy, including through the CMS Energy Task Force and the biodiversity mainstreaming agenda of the forthcoming Convention on Biological Diversity (CBD) Conference of the Parties (COP14)

The main challenges and solutions for the CMS Energy Task Force and the CBD in promoting and implementing mainstreaming of biodiversity into the energy sector were discussed, with the following issues and recommendations identified:

- Lack of compliance mechanisms for biodiversity conventions. Targeted guidance needs to be developed, communicated and enforced with stronger compliance mechanisms under relevant and able government ministries.

- Limited power and remit of environmental ministries. With energy often seen as a topic beyond their purview, the remit of environmental ministries needs to be broadened and included in cross-ministerial committees with joint responsibility for spatial and

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development planning and policy.

■ Poor national regulations or poor enforcement where they are in place. Legislative and regulatory review and guidance, and sharing lessons learnt from other countries, can help, as well as investor-led initiatives to improve implementation and accountability. The linkages and opportunities for synergy with the 2030 Agenda on Sustainable Development were also discussed, with the following outcomes presented:

■ For renewable energy development to be truly sustainable it needs to meet multiple international commitments, including those outlined by, but not limited to, the 2030 Agenda, UNFCCC and CBD, and should be promoted as often as possible during these fora.

■ The UN High Level Political Forum on Sustainable Development in July 2018 will discuss the following goals, among others, providing the opportunity to highlight linkages:

- **Goal 7.** Ensure access to affordable, reliable, sustainable and modern energy for all;
- **Goal 12.** Ensure sustainable consumption and production patterns;
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

■ Translating and mainstreaming relevant biodiversity provisions and safeguards into national policies and plans, such as national development plans and energy strategies as well as National Biodiversity Strategies and Action Plans (NBSAPs), is essential if on-ground mitigation is to occur.

■ The role played by Egypt's government and NGOs in the UNDP-GEF Migratory Soaring Birds Project and as a key member of the CMS Energy Task Force provides both an excellent national case study and an example to be highlighted as host of the CBD COP14, where mainstreaming of biodiversity into sectors such as energy will be the topic of the High Level Segment.

Concrete actions that can facilitate dialogue and enhanced cooperation among governmental ministries responsible for planning and budgeting and the relevant sectors and entities responsible for biodiversity were discussed. The following suggested actions were identified:

■ Stronger messaging to the wider international audience on the environmental impacts and means of mitigation of renewable energy and power infrastructure.

■ Utilising existing platforms, such as the CMS Energy Task Force, to constructively advocate for the implementation of mitigation actions

to prevent bird deaths. Multi-stakeholder, multi-national, cross-convention and cross-government collaboration, such as through task forces, may be required to streamline and fast-track common standards, guidance and tools that can be used to implement and report to multiple conventions and policy processes.

■ Advocating the business case for integrating bird/bat conservation into renewable energy and power infrastructure expansion.

■ Developing an information package for universities to include within their climate change mitigation, sustainability and renewable energy modules.

Key entry points for stakeholder engagement were discussed, with a range of CMS Energy Task Force linked meetings and communications suggested as follows:

■ CBD COP14, Egypt, November 2018, CBD SBI2 preparatory meeting, Canada, July 2018, and the mainstreaming agenda

■ UN High-Level Political Forum on Sustainable Development, US, July 2018 and annually

■ Responsible Business Forum, Singapore, October 2018, and similar fora

- - UN Environment Assembly, Kenya, March 2019
  - Utility Energy Forum, USA, April 2019
  - Africa Utility Week, South Africa, May 2019
  - CMS COP13, India, 2020
  - CBD COP15, China, 2020, and the wider post-2020 biodiversity framework development process

## 2. Sensitivity mapping, tools, and guidance

New research, guidelines and mapping tools which aid in the mitigation of impacts resulting from renewable energy infrastructure were presented. The group discussed the strengths and current limitations of some of the tools and approaches that are currently available:

■ **Sensitivity maps** are currently geographically limited and only partially accessible to stakeholders.

■ There are gaps in **institutional expertise** regarding site or species data, with greater funding, capacity and sharing of data needed, and challenges being the variability and coverage of data.

■ **Legislation** often suffers from a lack of policy coherence, enforcement, funding and awareness.

■ Often only generic **guidance** on monitoring and mitigation is available, insufficiently tailored to the species or sector, and needing to be better communicated and enforced.

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■ **Environmental Impact Assessment (EIA)** is a well-established approach, but can suffer from a lack of partiality, limited local capacity and poor enforcement.

■ **Strategic Environmental Assessment (SEA)** and **Cumulative Effects Assessment (CEA)** are needed but are less well-established, with their cost, need for cross-government and multi-stakeholder input, and implementation requirements limiting their uptake. CEAs are particularly challenging at a flyway scale given the multiple range states involved and multiple threats to migratory birds on their migration routes.

■ Finally, there is uncertainty around the implementation of **post-construction mitigation methods**, with a need for improved awareness, guidance and enforcement.

The discussions also identified the following needs:

■ Filling knowledge gaps (such as for the Americas/Asia, taxa other than birds, and energy installations other than wind) through data collection, availability, sharing and accessibility.

■ Development and enforcement of guidance and policy, standardised as appropriate, and refined, expanded, promoted and implemented through policy/legislative tools.

■ Increase in the capacity of national consultants, government agencies and developers to improve migratory bird/bat safeguards, by ensuring information and guidance is readily available and that skills are developed through training and learning opportunities (such as in energy EIAs, mitigation and post-construction monitoring) at national level. Resources are urgently needed for this to match the current high levels of investment in the sector.

■ Promoting stakeholder awareness by fostering linkages and communication platforms.

■ Funding to support all these activities.

### 3. Stakeholder engagement

Key stakeholders include energy ministries, investors, project developers, utilities, donors and civil society. Key stakeholder needs from the nature conservation community include:

■ Technical information on biodiversity impacts early on in the planning process, before decisions are made on the placement of energy and power infrastructure.

■ Information and guidance on the types of technologies available to mitigate bird deaths on existing and future developments.

■ A medium – provided by the CMS Energy Task Force - where developers, NGOs and governments can exchange experiences and collaborate to safeguard birds in wind power projects.

■ A detailed understanding of the vulnerability and mortality of birds/bats on windfarms and consequent development of sensitivity tools – which are not currently available globally or for all flyways - in various regions, particularly those where there is a forecast of significant investment.

■ Specialist advice on latest trends, biodiversity management practices, biodiversity networking and through input into biodiversity strategies.



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