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Green Road to Kunming

Planning Environmentally Sustainable Infrastructure

WORKSHOP SERIES 2022 28 April / 19 May / 23 June / 21 July

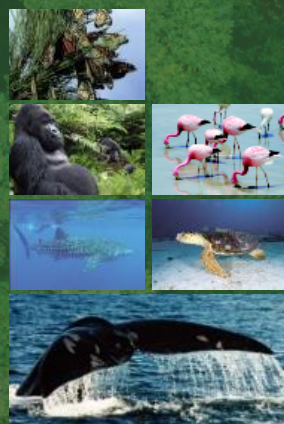


**Greening the
Energy Sector**



*The Convention on the Conservation of Migratory
Species of Wild Animals (CMS) Energy Task Force.*

*Promoting nature-sensitive renewable energy
while protecting migratory species*



Dr. Iván Ramírez, Head of Avian Unit, CMS Secretariat.



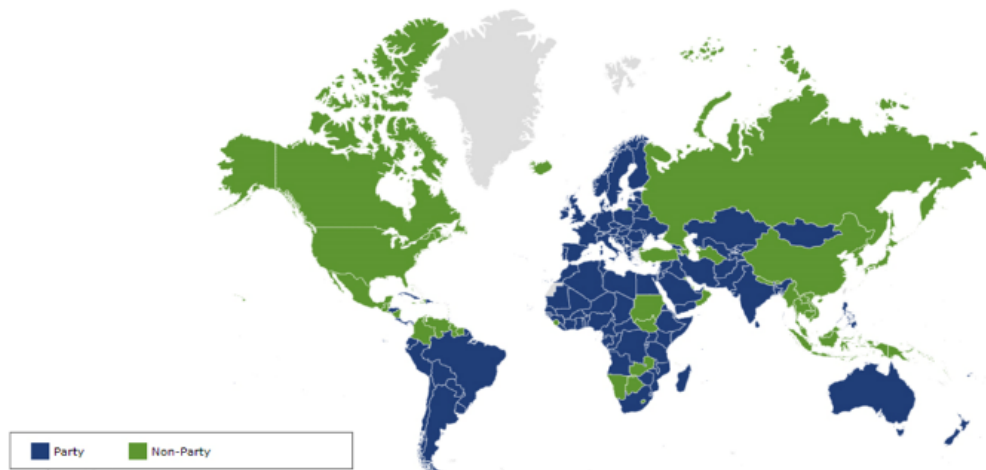
SUMMARY

- The CMS
- The Asian Region
 - Biological relevance
 - Key threats
- The role of the ETF
 - Solutions & Challenges
 - Next steps

Convention on Migratory Species (CMS)



- The Convention on Migratory Species is a multilateral environmental agreement (MEA) of the United Nations
- 133 Parties – 132 countries plus the European Union
- The only global treaty to focus on the conservation of migratory species and their habitats



Relevant CMS daughter agreements
represented in the ETF

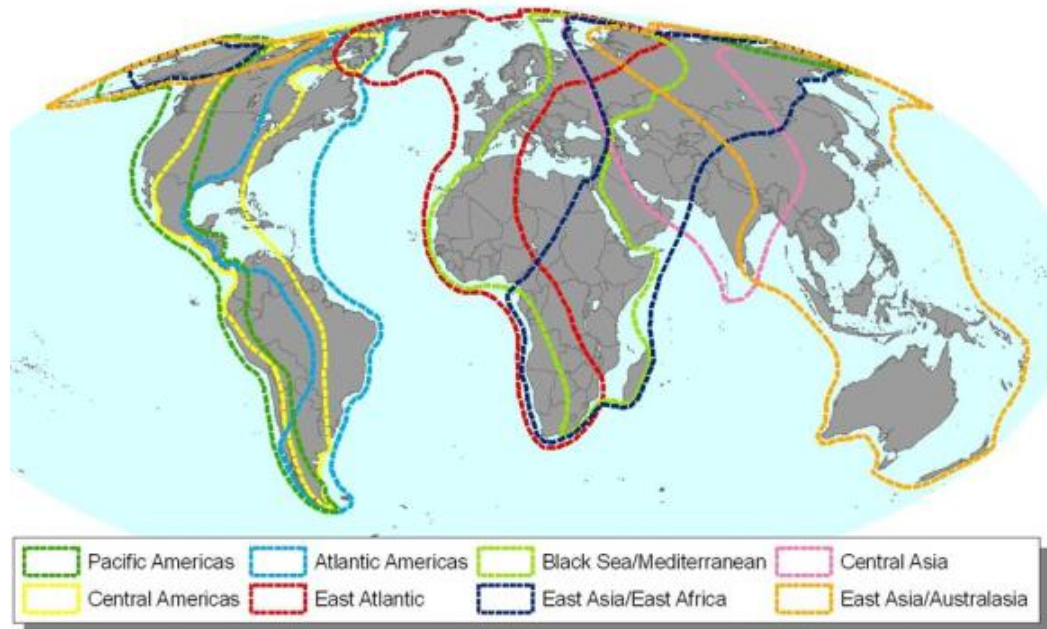


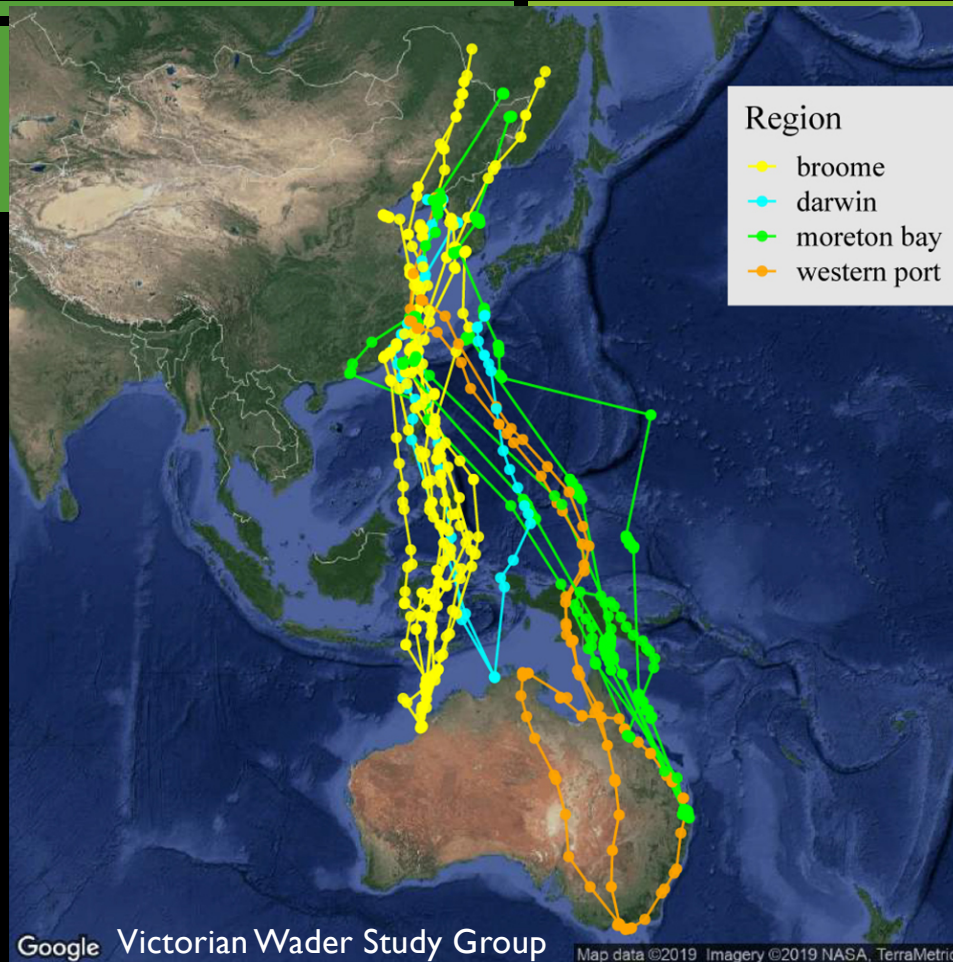
A VITAL REGION FOR MIGRATORY SPECIES

- East Asia/East Africa
- Central Asia (CAF)
- East Asia/Australasia (EAAF)

The EAAF encompasses 22 countries. It is home to over 50 million migratory waterbirds from over 250 populations, incl. 36 globally threatened species and 19 near threatened species.

The CAF is a migration superhighway between the Arctic and Indian Ocean, covering 30 countries and migration routes of over 300 bird species.





FLYWAYS NEED TO BE
SEEN AT GLOBAL SCALE...

Bird Tracking Reveals
Migratory Routes And
Critical Sites For Shorebirds

Example: Action Plan on the Endangered
Far-eastern Curlew: protection of critical
sites along the East Asian Flyway

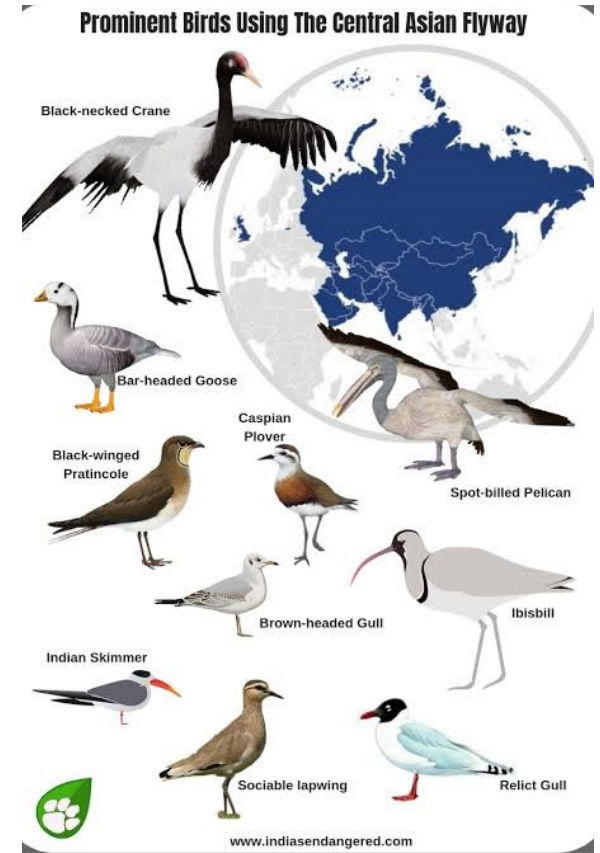
A REGION FACING MULTIPLE THREATS

- Habitat fragmentation and degradation
- Illegal killing and trapping
- Poisoning
- Unsustainable hunting
- Obstacles to migration (incl. inappropriately placed infrastructure)
- Climate Change
- Diseases



Red-headed Vulture, CR,
CMS App I+II

**CMS Concerted Action
on the Great Indian
Bustard:** preventing and
mitigating electrocution
and collision risk of
critically endangered iconic
grassland bird species





Opportunities:

\$3 Billion Nature Project Launched by BirdLife International, Asian Development Bank and the East Asian Australasian Flyway Partnership at Biodiversity COP15

NEWS PROVIDED BY
BirdLife International →
Oct 13, 2021, 09:05 ET



CAMBRIDGE, England, Oct. 13, 2021 /PRNewswire/ -- BirdLife International, (BLI) along with the Asian Development Bank (ADB) and the East Asian Australasian Flyway Partnership Secretariat (EAAFP), today launched a new Regional Flyway Initiative (RFI), a large-scale joint program to scale up the protection, restoration and sustainable management of 50+ key wetland sites in the East Asian Australasian Flyway stretching from Siberia and Alaska to New Zealand and Australia. The most threatened of the planet's eight important bird migratory superhighways, the flyway is critical for the livelihoods and well-being of hundreds of millions of people, as well as the annual migration of well over 50 million birds and 200 bird species in Asia and the Pacific.

The initiative was launched at the Biodiversity COP in Kunming, PRC.

MAJOR CHALLENGES AND OPPORTUNITIES

- The Asia Pacific region (excluding China) will radically increase its renewable energy capacity during 2021-2026 (70% growth; shares: solar 68%, wind 18%, hydropower 11%), especially India and ASEAN countries,
- There are many bird species susceptible to collision and electrocution: Great Indian Bustard, Bengal Florican, Cinereous Vultures, Griffon Vulture, Red-headed Vulture, Himalayan Griffon, White-rumped Vulture, Indian Vulture, Slender-billed Vulture, Pallas's Fish-Eagle, Saker Falcon
- Improving livelihoods and achieving UN SDGs require both transition to renewable energies and maintaining biodiversity values and the ecosystem services provided by migratory species.

*source: IEA Renewables 2021

<https://www.prnewswire.com/news-releases/3-billion-nature-project-launched-by-birdlife-international-asian-development-bank-and-the-east-asian-australasian-flyway-partnership-at-biodiversity-cop15-301398484.html>

Renewable energy and migratory birds

- ▶ Habitat loss and fragmentation
- ▶ Collision with power lines and wind turbines
- ▶ Electrocutation
- ▶ Deviation of migratory routes
 - ▶ Poor body condition
 - ▶ Lower breeding success
 - ▶ Increased mortality
- ▶ Asia-specific studies still a minority compared to other regions

J. Bernardino et al.

Biological Conservation 222 (2018) 1–13

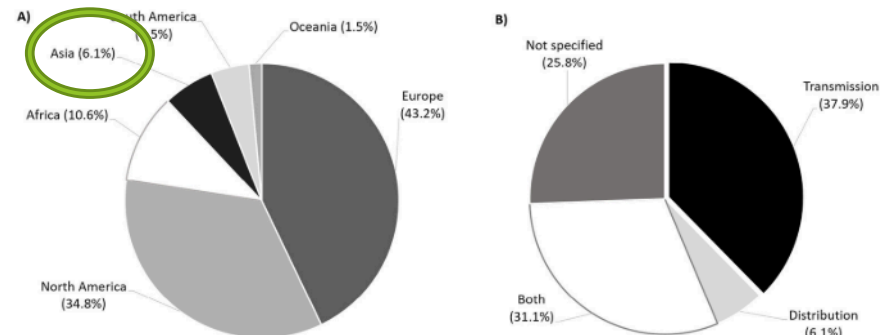
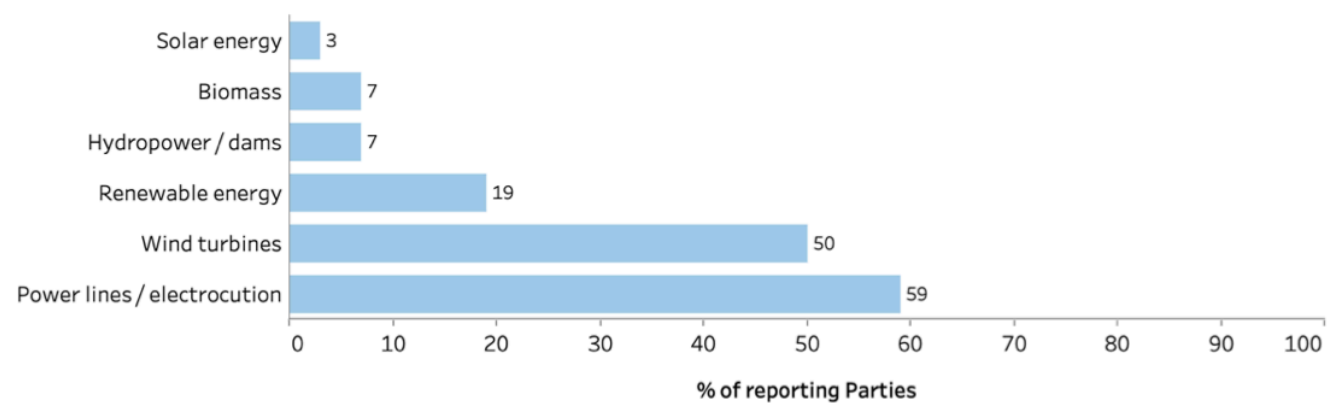


Fig. 3. Percentage of studies conducted (A) in each region of the world and (B) on each power-line type, compiled through a systematic literature search and reporting first-hand data on bird collisions with power lines (N = 132).



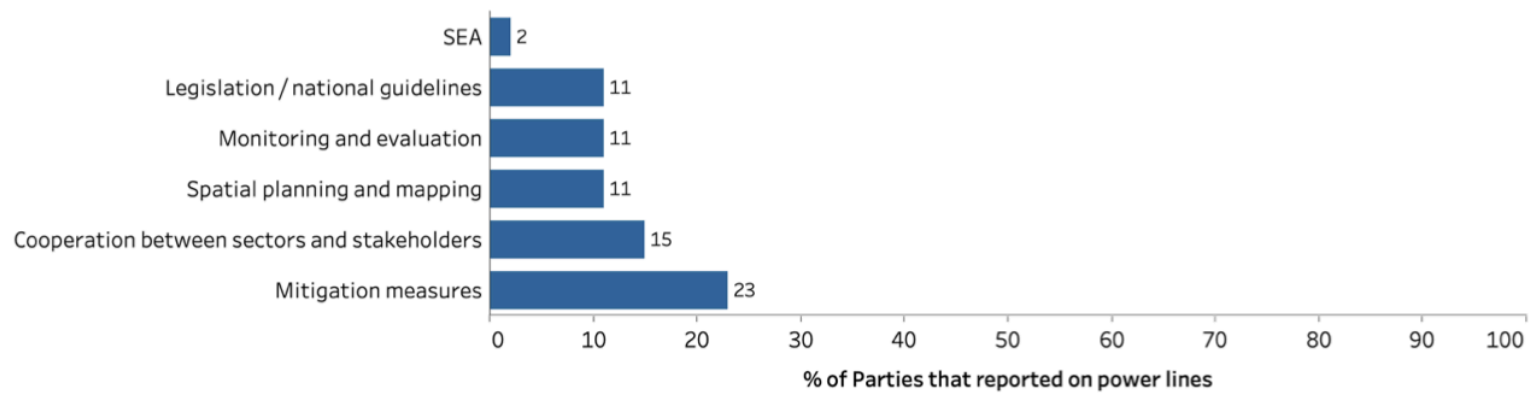
A relevant issue to CMS Parties

Figure 4. Percentage of Parties that specifically mentioned power lines/electrocution and/or renewable energy in the 2019 National Reports.



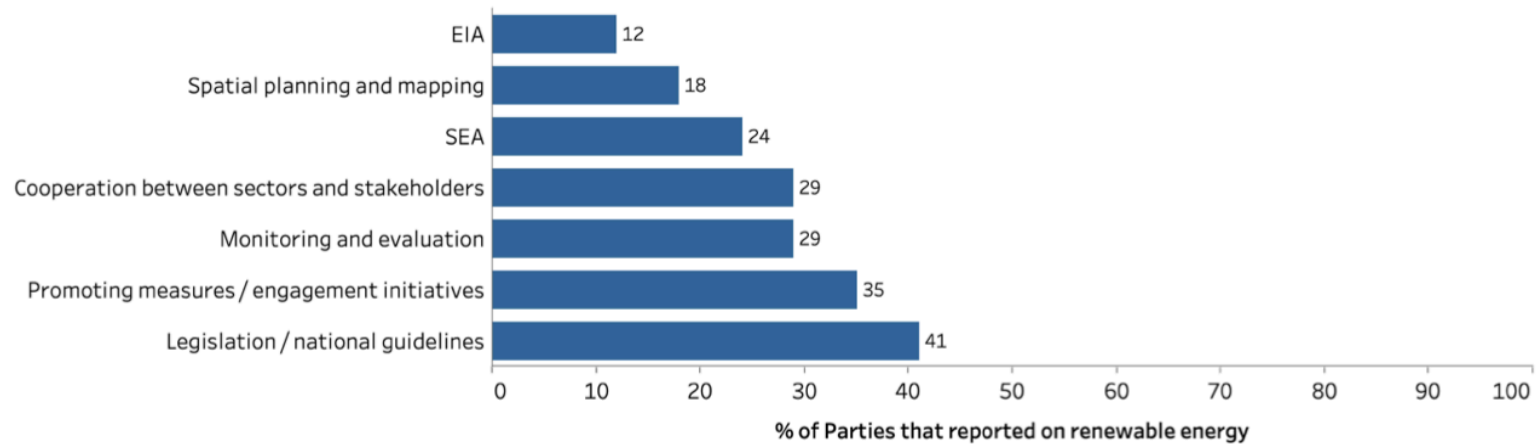
Parties are already acting

Figure 5. Reported measures taken by Parties to counter **power line-related pressures** to migratory species in the 2019 National Reports.



Parties are already acting

Figure 6. Reported measures taken by Parties to counter **renewable energy-related pressures** to migratory species in the 2019 National Reports.



A PLATFORM FOR INTERNATIONAL COOPERATION: THE ETF

- Mandate to establish Energy Task Force in 2014 (CMS Res 11.27 (Rev.COP13))

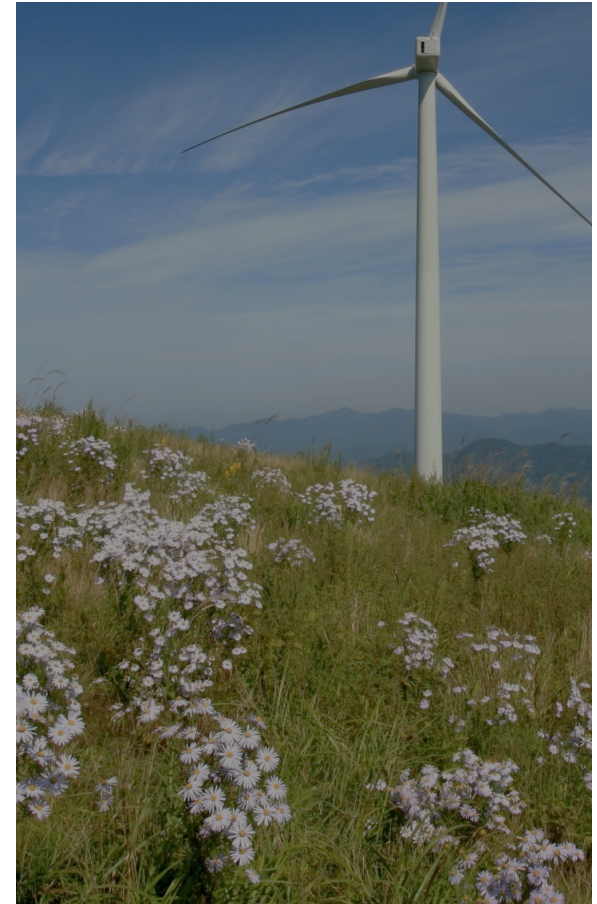
- Role of the Energy Task Force (ETF):

The ETF provides a forum for developing and disseminating best practice policy and technical guidance, and engagement of relevant stakeholders, in order to reconcile energy sector developments with the conservation of migratory species.



Multi-stakeholder membership

- ▶ **National governments [environment & energy]:** Brazil, Bulgaria, Egypt, Ethiopia, France, Germany, Ghana, Greece, Hungary, Israel, Jordan, Kenya, Morocco, Nigeria, Saudi Arabia, South Africa, Spain
- ▶ **Secretariats of MEAs:** AEWA, CMS, CBD, EUROBATS, Ramsar Convention, Raptors MOU
- ▶ **Industry:** African Sustainable Energy Association, WindEurope,
- ▶ **Bilateral & multilateral organisations:** African Union, African Sustainable Energy Association, East Asian-Australasian Flyway Partnership, European Bank for Reconstruction and Development, International Finance Corporation (IFC/World Bank Group), IRENA, Power Africa – USAID, World Bank
- ▶ **NGOs and other:** BirdLife International, British Trust for Ornithology, Endangered Wildlife Trust (EWT), Renewables Grid Initiative
- ▶ **Observers:** Euronatur, IUCN, Ethiopian Wildlife and Natural History Society, Regional Center for Renewable Energy and Energy Efficiency (RCREEE), 11 National Birdlife partners, IAF, OREE, UNAM Mexico, SABAA, American Bird Conservancy (ABC), CBCGDF





HOW DO WE WORK

- Provide a unique platform for collaboration across the UN, Governments, investment banks, technical experts, NGOs and other stakeholders.
- Facilitate the development of best-practice and science-based renewable energy solutions that minimize and mitigate species interactions.
- We identify knowledge gaps and address emerging issues globally
- Promote uptake by public and private investors and project developers

ETF offers solutions

- ▶ Guidance
 - ▶ Wind turbines
 - ▶ Power lines
 - ▶ Case studies
 - ▶ Mitigation measures
 - ▶ Safeguard policies
- ▶ Programme of work
 - ▶ Technical groups (powerlines, Raptors Electrocutation)
 - ▶ Identification of gaps
 - ▶ Ensuring guidance reaches Governments and Financial Institutions



**Convention on the Conservation of
Migratory Species of Wild Animals**



**5th Meeting of the CMS
Multi-Stakeholder Energy Task Force (ETF5)**

Online, 30 November – 1 December 2020

ETF5/Inf.3/Rev.1

INFORMATION RESOURCES

**SUSTAINABLE DEPLOYMENT OF RENEWABLE ENERGY TECHNOLOGIES AND POWER
LINES: AVOIDING AND MITIGATING NEGATIVE IMPACTS ON BIODIVERSITY**

(Prepared by Birdlife International for the Energy Task Force)

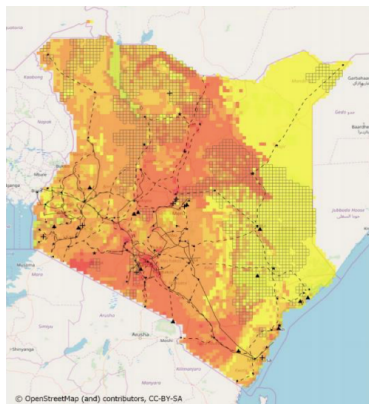
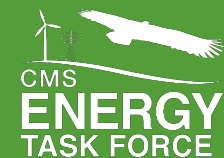
Last updated: December 2020

Summary

This document has been prepared for governments, investors, developers and civil society to help them to avoid and mitigate negative impacts of renewable energy technologies and power lines on biodiversity. It comprises an introduction to the necessary considerations for reducing the impact of renewable energy and powerlines, followed by guidelines, decision support tools, and general information resources on the following issues:

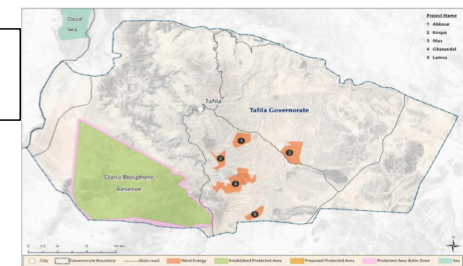
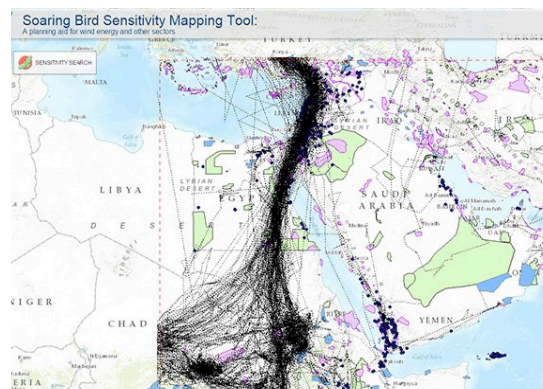
- strategic planning;
- environmental assessments;

A PLATFORM FOR SMART POLICIES & TECHNICAL GUIDANCE

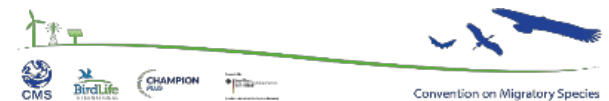


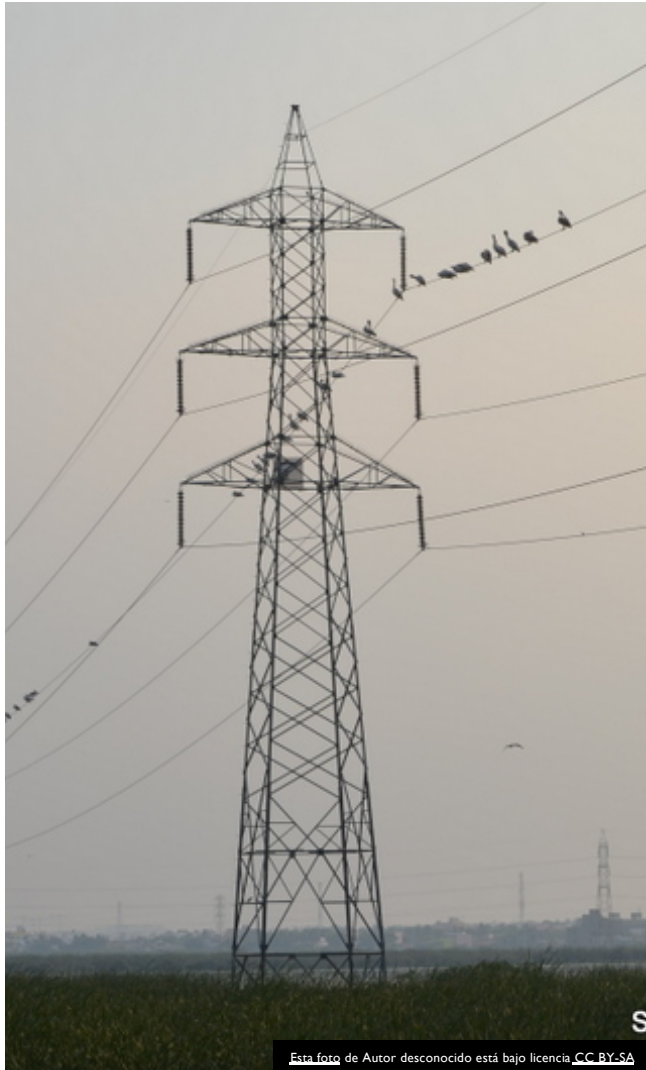
Sensitivity mapping

Promoting information for SEAs/EIAs and regional planning



- Good Practice on post-construction monitoring
- Decision-support tools
- Quick guidance on powerlines etc.





SOME OF THE ACHIEVEMENTS TO DATE : UPDATE WITH RECENT EXAMPLES

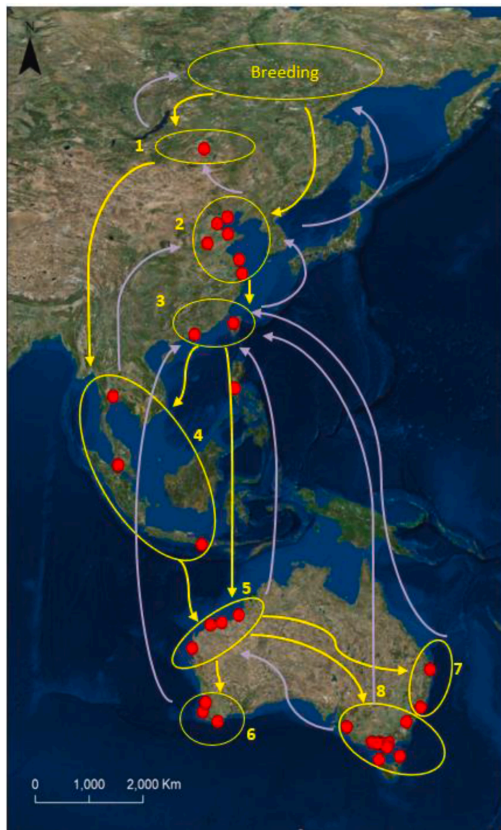
- [Guidelines](#) on How to Avoid or Mitigate Impact of Electricity Power Grids on Migratory Birds in the African-Eurasian Region
- [Analysis of progress of CMS Parties](#) in reconciling energy development with the conservation of migratory species
- Development of sensitivity mapping in Africa and Japan under way; proposals being developed for East Asia and India
- Development of spatial mapping tools to assess potential risks, and guidance to governments for meeting commitments under the Paris Agreement with minimal impact on biodiversity
- EUROBATS Guidelines for Consideration of Bats in Wind Farm Projects
- Mitigating biodiversity impacts associated with solar and wind energy development: guidelines for project developers
- Quick guidance preventing electrocution on birds
- Case Study on Retrofitting Powerlines in Mongolia

East Asian Australasian Flyway: a case study

- ▶ Curlew Sandpiper: 80% decline over 3 generations
- ▶ Red knot: 57,4% decline over 3 generations.
- ▶ Far Eastern Curlew: 81.7% over 3 generations
- ▶ Urgent need for healthy coastal wetlands for breeding, roosting and feeding
- ▶ Will species and site protection allow economic growth?



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Yes, protecting migratory sp means increasing economic viability

- ▶ The protection of intertidal habitats in the yellow sea will provide more than \$30 Billion US dollars/year from Ecosystem Services
 - ▶ Xiao, H., et al, 2021.
- ▶ More research is needed across the Asian region but the message is clear: Integrated management & protection supports sustainable development.



THANK YOU!

www.cms.int

www.cms.int/en/taskforce/energy-task-force

email: cms.secretariat@cms.int



The Government of India, through the Ministry of Environment, Forest and Climate Change were recognized as Champion Plus for their generous support and commitment towards Making energy safe for wildlife for the period 2020-2023. The operations of the Energy Task Force have been funded with the contribution granted by India under the Migratory Species Champion Programme.



Convention on Migratory Species