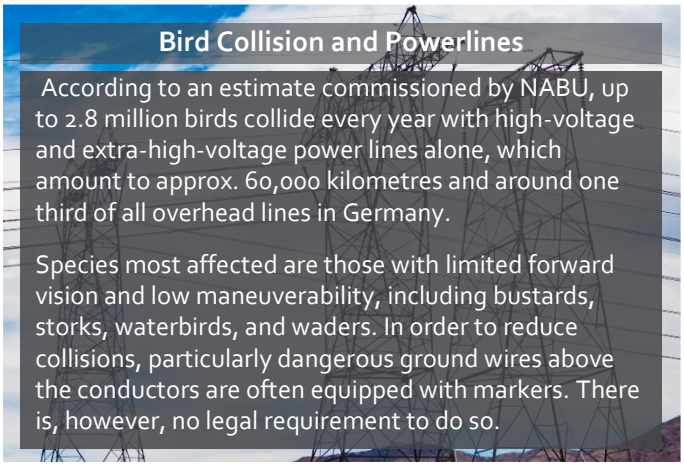
Powerlines and Bird Reporting Portal – Germany

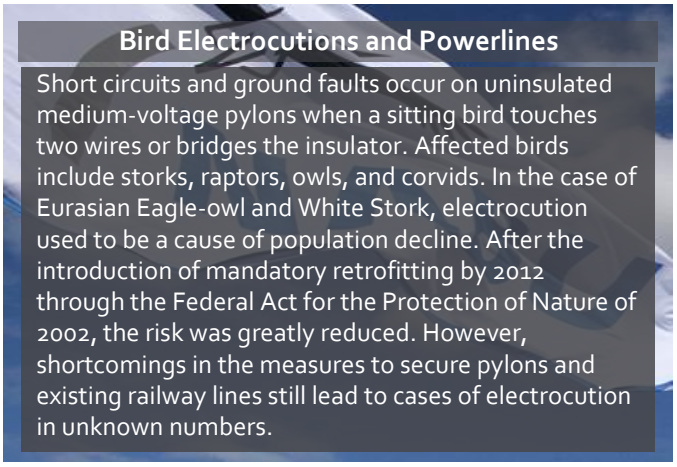
The Convention on the Conservation of Migratory Species of Wild Animals (CMS) Energy Task Force (ETF) is a multi-stakeholder platform that works towards reconciling energy developments with the conservation of migratory species. **NABU and the Renewables Grid Initiative champion the use of an online reporting portal for the standardised reporting of bird casualties on power lines.**



Bird Collision and Powerlines

According to an estimate commissioned by NABU, up to 2.8 million birds collide every year with high-voltage and extra-high-voltage power lines alone, which amount to approx. 60,000 kilometres and around one third of all overhead lines in Germany.

Species most affected are those with limited forward vision and low maneuverability, including bustards, storks, waterbirds, and waders. In order to reduce collisions, particularly dangerous ground wires above the conductors are often equipped with markers. There is, however, no legal requirement to do so.



Bird Electrocutions and Powerlines

Short circuits and ground faults occur on uninsulated medium-voltage pylons when a sitting bird touches two wires or bridges the insulator. Affected birds include storks, raptors, owls, and corvids. In the case of Eurasian Eagle-owl and White Stork, electrocution used to be a cause of population decline. After the introduction of mandatory retrofitting by 2012 through the Federal Act for the Protection of Nature of 2002, the risk was greatly reduced. However, shortcomings in the measures to secure pylons and existing railway lines still lead to cases of electrocution in unknown numbers.

Project Overview

Unlike for wind energy, there is no nationwide scheme to record chance finds of powerline casualties. In 2017, NABU and the Renewables Grid Initiative (RGI) set up an online reporting portal for the standardised reporting of discovered bird casualties here. The accumulated data is intended to support bird protection efforts of the German transmission and distribution system operators, and should lead to targeted securing of hazardous lines and pylons and to better siting decisions during planning processes.

Key species: Bustards, storks, waterbirds, waders (collision), raptors, owls, corvids (electrocution).

Project partners: NABU and Renewables Grid Initiative (RGI) together with many German TSOs and DSOs.

Solutions and Actions Taken

- ✓ Everyone can support the project by reporting bird casualties related to power lines, both through collision and electrocution, to the online portal (Citizen Science).
- ✓ All reports and findings are entered into a database and evaluated by qualified ornithologists.
- ✓ Casualties are assessed according to the protection status of the involved species and the frequency of incidences.

Renewables Grid Initiative

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Convention on Migratory Species

- ✓ Reports are geo-referenced in order to identify high risk areas and detect the corresponding grid operators. This subsequently enables further planning and the implementation of suitable measures to reduce the risks for birds at existing power lines.
- ✓ Via regular meetings, NABU, RGI and German grid operators exchange data and consult on high-risk regions and necessary actions.
- ✓ An open-access online map illustrates reports of bird casualties as well as associated measures.

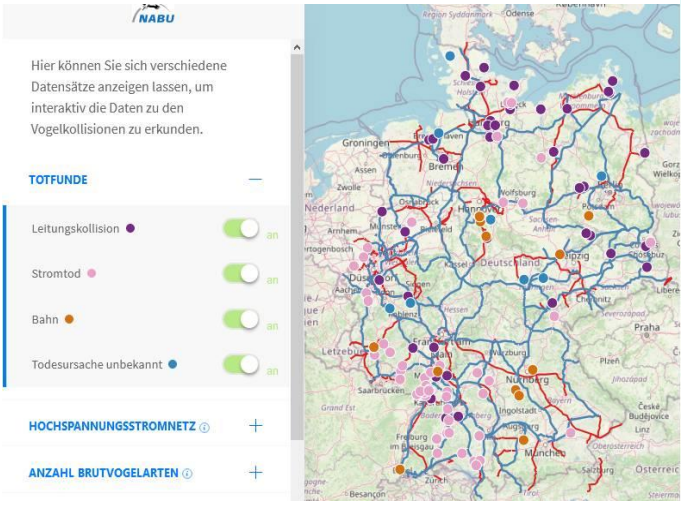
Enabling Conditions for Success

- ✓ The reporting portal was jointly initiated by RGI, NABU, and grid operators.
- ✓ Any stakeholder can report their findings to the portal.
- ✓ This is an unprecedented collaboration among the public and key stakeholders such as NGOs and transmission/distribution system operators with the joint goal of promoting sustainable and biodiversity-friendly power grids in Germany.
- ✓ Collected data enables the identification and mitigation of critical structures, such as by installing bird protection markers, and supports bird-safe planning of new power lines.
- ✓ The larger the data set, the better the understanding of impacts of man-made structures on birds through scientific analyses.

Next Steps – Monitoring and Mitigation

- ✓ Continue to mitigate critical structures.
- ✓ Engage more distribution system operators in Germany to become partners in the project, ensuring commitments to carry out appropriate mitigation.
- ✓ Increase the general public awareness on this issue and establish the Portal as an important tool for reporting power line collision casualties.
- ✓ Further knowledge on impacts of engineered structures on birds, and thus on the relationship between birds and power lines.

NABU/Manfred Delpho (www.delpho.de)



Online map on the reports of bird casualties on power lines (NABU). Key: Mortality finds association (point features): purple = line collision, pink = electrocution, orange = rail, blue = unknown
Maximum voltage lines (linear features): Red = 220kV, Blue = 380 kV

About CMS and the ETF

The CMS, also known as the Bonn Convention, works for the conservation of a wide array of endangered migratory animals worldwide through the negotiation and implementation of agreements and species action plans. The ETF brings together governments, multilateral environmental agreements, investors, the private sector and non-governmental organizations with an aim of avoiding and minimising the negative impacts of energy developments on migratory species.

Getting Involved

If you wish to learn more about the work of the ETF, become a member or engage otherwise, please contact:

cms.secretariat@cms.int

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