

Managing Effects of Wind Power on Birds and Bats

Title

Wind energy can make a valuable contribution to tackling climate change and lasting sustainable development. Already 19% of global electrical supply is provided by renewables and wind contributes 2.5% of global electrical supply and is expected to grow substantially in the future. The Global Wind Energy Council suggests that by 2020 wind energy could contribute up to 12% of global supply. This means a substantial increase in the number of turbines and wind farm developments worldwide. Poorly designed and sited wind farms, though, have been shown to have detrimental effects on bird and bat populations. Istanbul lies at the cross-roads of a major migration flyway, connecting the breeding grounds of Eurasia with the wintering grounds in Africa. Over 2 million birds use this flyway twice a year, and it is the second most important flyway in the world. It is therefore very appropriate that the 'Birds and Bats Master Class' is being held here, in conjunction with the Partnership Forum of the Climate Investment Funds (CIF). For birds, wind turbines pose the risk of collisions with turbines, and collision or electrocution with associated power transmission infrastructure. Notably, larger birds such as vultures, eagle and storks are the most vulnerable to collision which raises the rate of mortality at these sites. For bats, there is the additional concern about barotrauma which can kill bats flying next to turbines, as the sudden drop in air pressure causes fatal tissue damage. For both bats and birds, valuable habitat can be lost through developments, and wind farms can affect the use of neighbouring habitats beyond the footprint and have a barrier effect. They can represent significant threats to migrating birds and bats, especially when the cumulative impacts of multiple developments on a migration flyway are considered. The 'Birds and Bats Master Class' being held in conjunction with the Clean Technology Fund's Pilot Countries meeting will enable a range of different parties to come together, including partners from the CIF Scaling Up Renewable Energy Program in Low Income Countries (SREP) where more wind projects are expected in the pipeline. Debate amongst developers, lead government agencies, donors and civil society organisations is vital if lessons are to be learnt and best practice advanced. The Master Class will benefit from a reporting back on recent CIF scoping visits to [Egypt](#), [Turkey](#) and [South Africa](#) which have looked at how biodiversity considerations in wind energy development are being addressed and how the lessons learnt and good practice can be shared more effectively and more widely. The Master Class will cover issues such as the need for strategic planning and sensitivity mapping, the advances being made in design and operations of wind farms, and the importance of pre-and post-construction monitoring. The Climate Investment Funds has been working with BirdLife International and other key stakeholders in reviewing biodiversity considerations in wind energy development. The CIF is developing a knowledge sharing platform for continued learning as the CIF investments mature, and is working to build

a CIF community of practice that can keep this issue under review and promote the dissemination of lessons learned. BirdLife International is working with UNDP/GEF on the Migratory Soaring Birds project which is focused on the Rift Valley/Red Sea flyway. Under the Migratory Soaring Birds project, BirdLife is developing sensitivity maps and guidance documents for the wind and renewable energy sector for the region with the aim of minimising any negative impacts on birds. [The Birds and Bats Master Class at the CIF 2012 Partnership ForumLive Webcast: Thursday, November 1, 4:00pm – 6:15pm Istanbul time](#)