Climate change poses a significant and increasing risk for biodiversity and people. In response, the UN Framework Convention on Climate Change (UNFCCC) Paris Agreement aims to limit global climate change to 1.5°C warming, requiring urgent mitigation of greenhouse gas emissions, particularly through a transition from fossil fuels to renewable energy. However, the necessary rapid, large-scale development and deployment of sustainable renewable energy must avoid both harm to biodiversity and jeopardising the provision of nature-based solutions to climate change\(^1\), requiring coherent and coordinated policies and implementation through the post-2020 biodiversity, climate and sustainable development agendas.

**SUMMARY AND KEY MESSAGES**

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 taking into account both nature and nature-based solutions to climate.** The impacts on species and ecosystems can be particularly significant if renewable energy installations and associated infrastructure such as powerlines are planned and installed inappropriately.

- Wind farms can be beneficial in tackling climate change and can be deployed at large scale with minimal negative impacts if strategically sited. Poorly-sited or inappropriately operated wind farms, however, can result in collisions with birds and bats, particularly migratory species.
- Solar energy is an important element of a sustainable energy mix. If deployed appropriately it may have relatively low environmental risks, but further research is needed to determine this.
- Hydropower is a mature and cost-competitive source of renewable energy, but poses a high risk to biodiversity and has a poor environmental track record.
- Although bioenergy is recognised to have considerable greenhouse gas mitigation potential, the current deployment of bioenergy via monoculture plantations is leading to the conversion of natural habitats and consequent loss of biodiversity on a huge and potentially catastrophic scale, often with limited savings or even increases in emissions.
- Powerline deployment is necessary for transmitting renewable energy to end users, often through remote areas, but if inappropriately designed or sited can lead to bird electrocutions.

For renewable energy development to be truly sustainable it needs to meet **multiple international commitments**, including but not limited to those under the 2030 Agenda for Sustainable Development, UNFCCC and post-2020 global biodiversity framework. International cooperation between Parties and other stakeholders is required to maintain ecological connectivity for both species and nature-based solutions for climate change mitigation and...
adaptation, including through a connected network of key biodiversity areas in conjunction with sustainable land use planning and management.

Finally, while key, the renewable energy transition is **not the only climate action needed**; over the next decade, **nature-based solutions will also be critical** as countries undergo the transition from fossil fuels\(^2\), as well as increasing energy efficiency and reducing waste and over-consumption.

**RECOMMENDATIONS FOR THE POST-2020 FRAMEWORK**

The post-2020 global biodiversity framework and climate-related policies and actions (which include renewable energy) must strive to establish and refine **SMART\(^3\) targets and indicators** that will assist Parties to design, implement and report against clearly defined goals. In addition, coordinated efforts must be ensured to deliver linkages with the wider **sustainable development agenda**, including on SDG 7 and 13 (clean energy and climate action) and 14 and 15 (life underwater and on land).

BirdLife would like to see **improved communication, stakeholder engagement and cross-sector planning** with regard to nature-sensitive renewable energy development reflected in the implementation of the post-2020 nature, climate and sustainable development agendas, as follows:

- **Greater emphasis on how Parties can incorporate consideration of climate change, renewable energy and biodiversity and related national priorities into their National Biodiversity Strategies and Action Plans (NBSAPs)**, as well as into their Nationally Determined Contributions (NDCs) to meet the goals of the Paris Agreement.
- Multi-stakeholder, multi-national, cross-convention and cross-government collaboration, such as through **task forces**, to streamline and fast-track common standards, guidance and tools that can be used to implement and report to multiple conventions and policy processes.
- **Utilisation of existing platforms**, such as the Convention on Migratory Species (CMS) Energy Task Force\(^4\) and those established nationally under the Migratory Soaring Birds (MSB) Project\(^5\), to advocate and support the implementation of relevant mitigation actions.
- Increase in the **capacity** of consultants, government agencies and developers to improve and demonstrate the business case for environmental safeguards, by making information and guidance available and developing skills in impact assessment, mitigation design and post-construction monitoring, to match the current high levels of investment in the sector.

BirdLife would like to see ambitious but realistic commitments by 2030 on the following proposed target **themes and elements** with regard to nature-sensitive renewable energy development:

- **Reorientation of investment** from fossil fuels to renewables, and introduction of policies, regulations and incentives to promote nature-sensitive renewable energy investment and technology transfer (e.g. requirement to develop and use **tools and guidance** such as sensitivity mapping and the Integrated Biodiversity Assessment Tool (IBAT)\(^6\) as part of the finance package, pre-empting development approval).
- **Strategic planning**, applying tools such as **Strategic Environmental Assessments** (SEAs) and **Environmental Impact Assessments** (EIAs), and a commitment to the mitigation hierarchy, considering direct, indirect, cumulative and transnational impacts across the entire life-cycle.
- **Monitoring** of biodiversity impacts throughout the lifecycle of renewable energy projects to inform project activities and policy responses as well as progress towards targets.
- A **greater focus on ecological connectivity and international cooperation**, embedding conservation of site networks and ecological processes into spatial planning and development activities (including renewable energy), at ecologically-relevant scale, making efforts to avoid areas that are ecologically sensitive or of high biodiversity value, such as **Key Biodiversity Areas**\(^7\).

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2. For more details see BirdLife's separate position paper on nature-based solutions for the post-2020 nature, climate and sustainable development agendas at [www.birdlife.org/post2020](http://www.birdlife.org/post2020)
3. Specific, Measurable, Ambitious, Realistic & Time-bound, to which we add Unambiguous & Scalable: Green et al. 2019 [https://doi.org/10.1111/cobi.13322](https://doi.org/10.1111/cobi.13322)
7. For more details see BirdLife’s separate position papers on a site-based conservation target and connectivity and international cooperation for the post-2020 framework at [www.birdlife.org/post2020](http://www.birdlife.org/post2020)