



# Migratory species and renewable energy

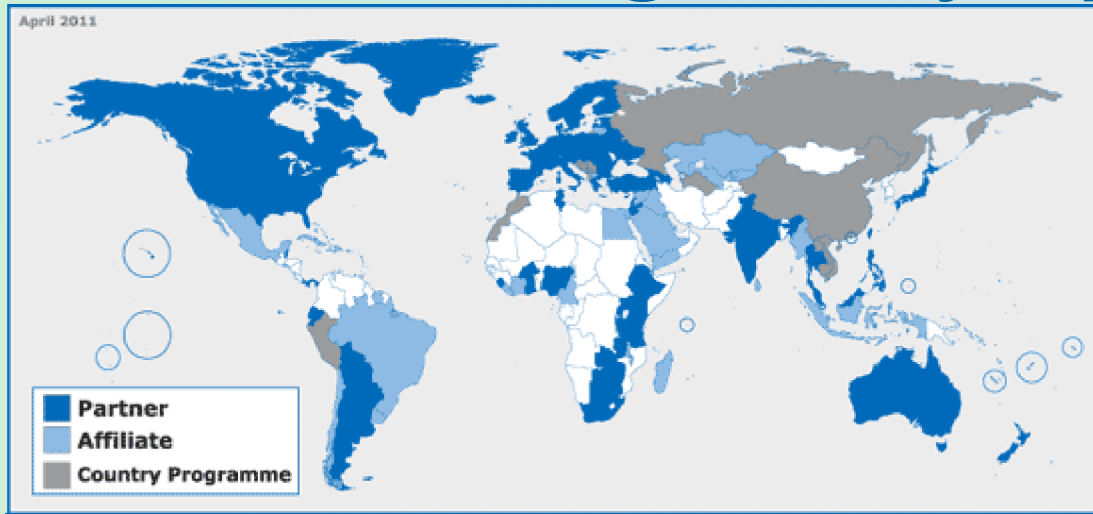
**Dr Ivan Scrase**  
**BirdLife International (RSPB)**

*IRENA Workshop on Social Acceptance of Renewable Energy, Abu Dhabi.*  
*Tues 8 October*

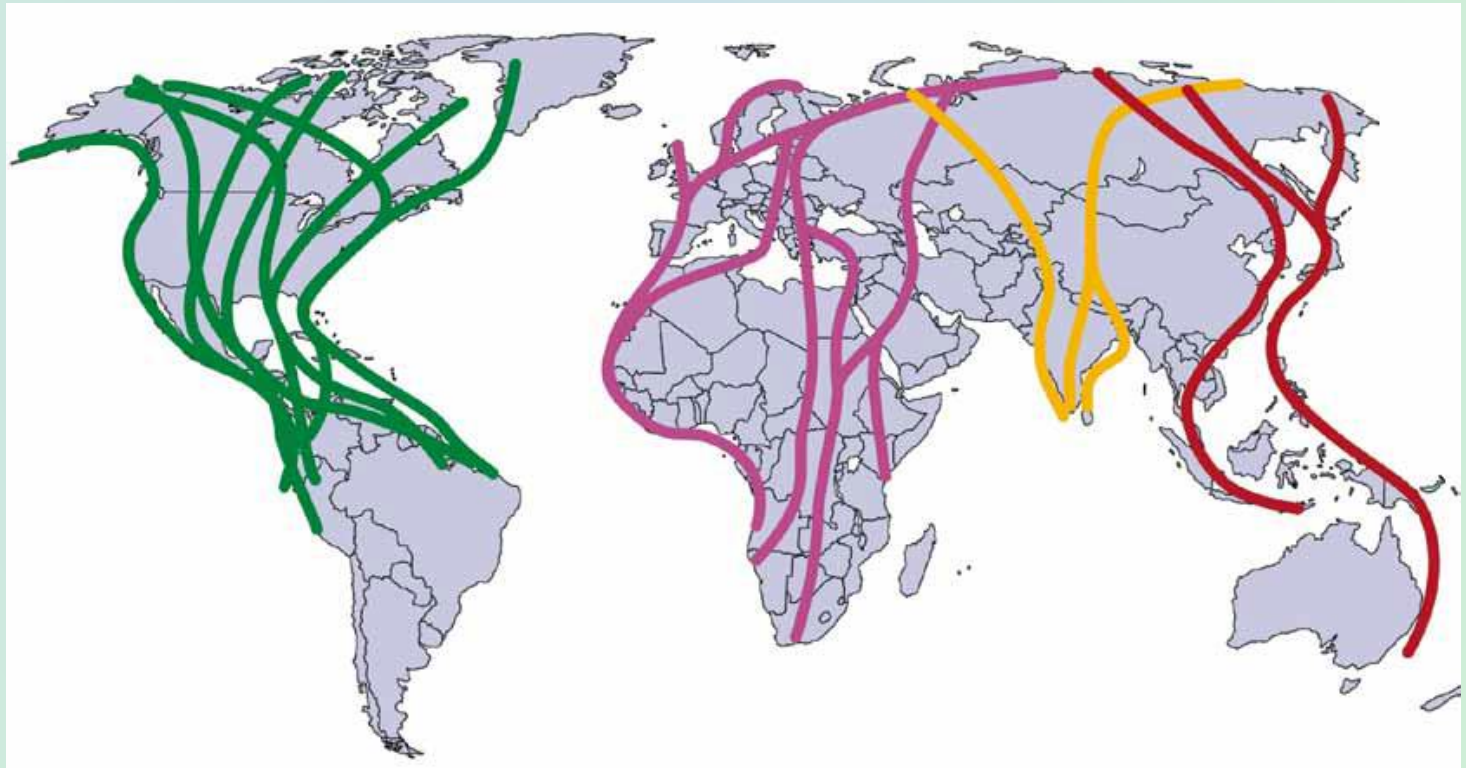
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# BirdLife? Migratory species?

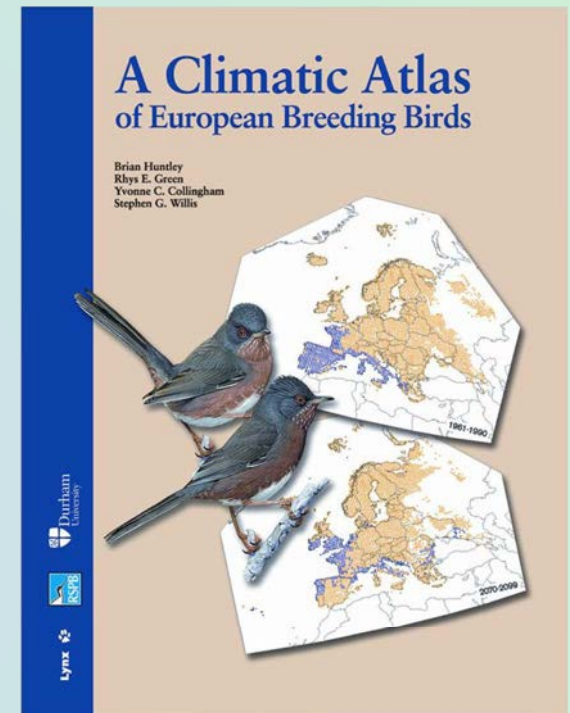


# The principal flyways of migratory waterbirds breeding in the Northern Hemisphere.



# Energy, birds and wildlife

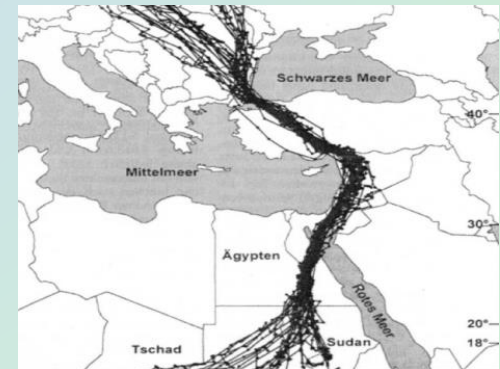
- Climate change
- Habitat loss
- Habitat fragmentation/degradation
- Disturbance/ displacement
- Barrier effects
- Collision / electrocution risks
- Noise impacts on cetaceans
- Pollution
- Cumulative and flyway impacts
- Sustainable development



**Climate change is a real, urgent threat. We need renewables, but they must be developed in harmony with nature**

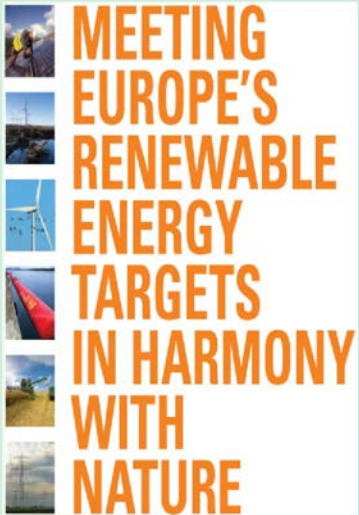
# Renewables, wildlife and social acceptance

- Renewables enjoy public support as 'green' technologies
- Wildlife conservation is 'green' and popular
- Harm to wildlife is:
  - bad PR
  - bad economics
  - bad international relations!



# Avoiding and minimising impacts

- Evidence-based approach to risks
- Plan ahead for industry growth
- Get policy frameworks right
- Work with stakeholders
- Use maps, local expertise, good data
- Use robust environmental assessments
- Avoid, minimise, compensate for harm
- Benefit nature and local economies
- BirdLife can help!



# Wind power and birds: likely effectiveness of mitigation measures

	Collision	Disturbance	Barrier effects	Habitat loss
Careful site selection	H	H	H	H
Sensitivity mapping	H	H	H	H
Micro-siting of turbines	H	H		
Selection of appropriate turbines	M			
Using smaller number of larger turbines	M	M	M	
Avoid / mark guy ropes on meteorological towers and other structures	H			
Install transmission cables underground	M			
Use good construction practices		H		M
Lighting	H			
Use flight diverters	M			
Paint turbines	M			
Deterrents	M			
Habitat manipulation	M	Negative		
Increase turbine cut-in speed	H			
Operate short-term shutdown during peak activity	H			
Remove problem turbines	M			
Use good maintenance practices	M	M		M

# BirdLife working with industry

Renewables  
Grid Initiative 

**ecotricity**

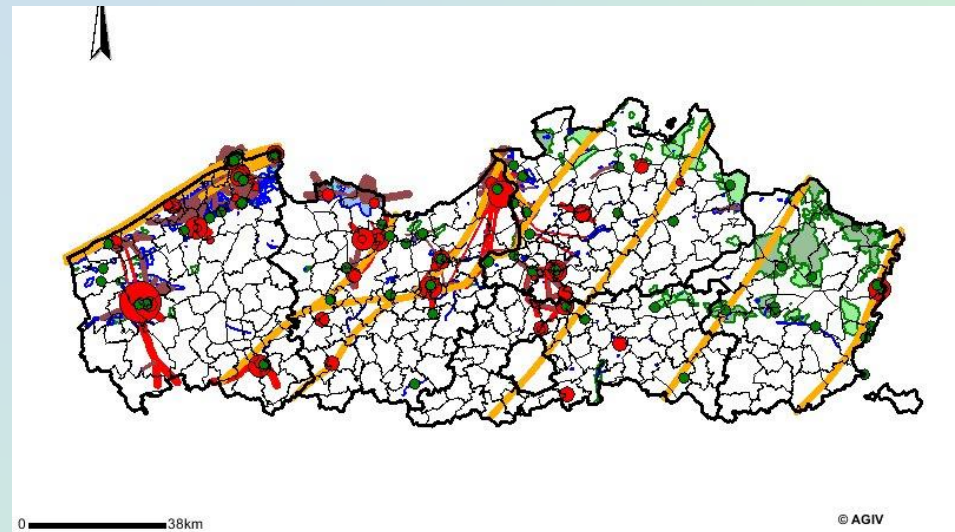
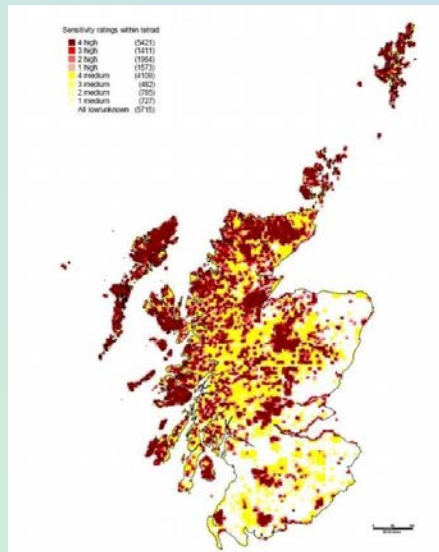
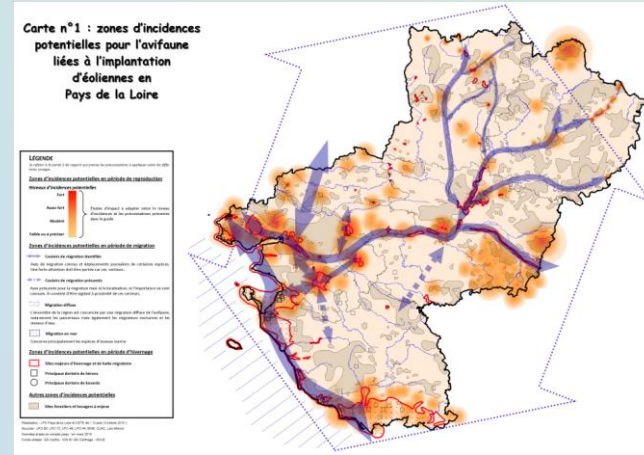
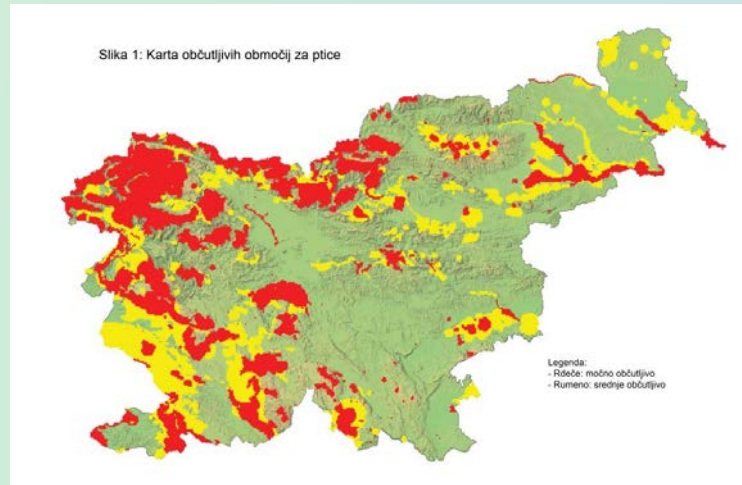
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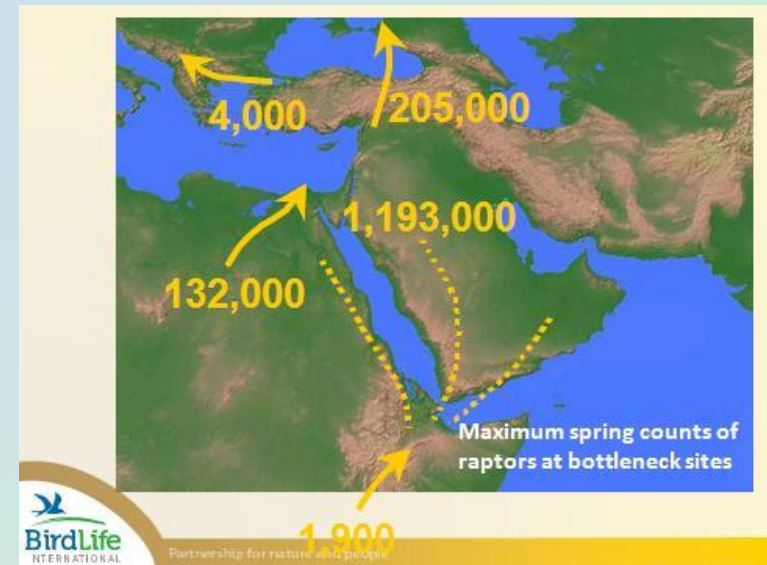
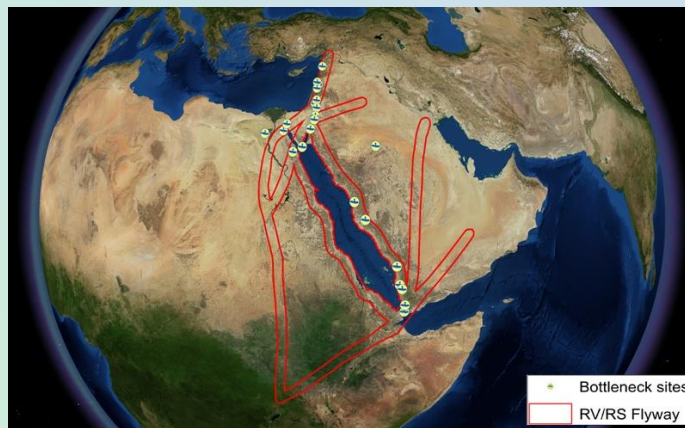
# Bird / wind power sensitivity mapping



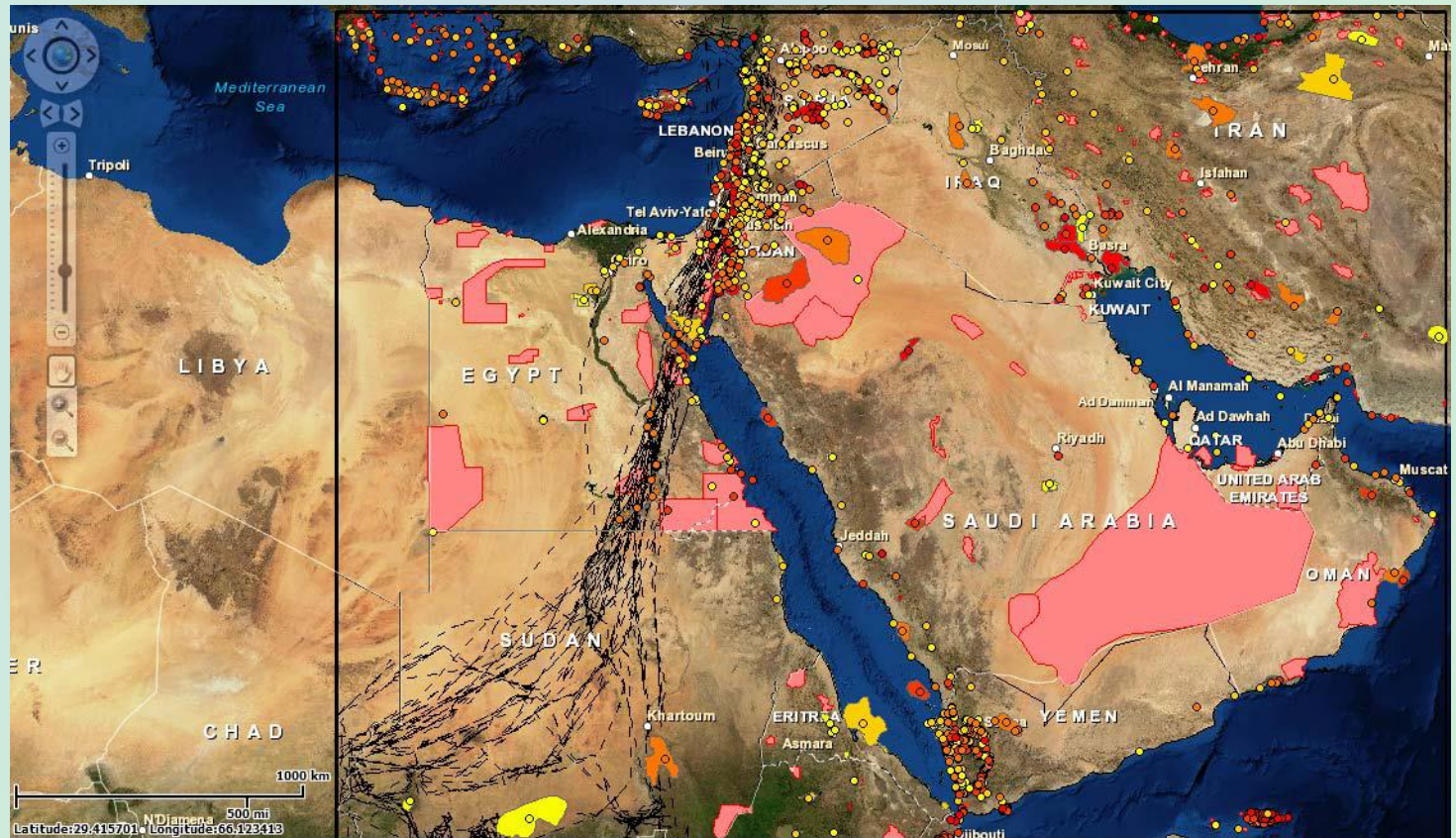
# Migratory Soaring Birds project



- The aim of the MSB project is to conserve and protect soaring birds during their migration along the Rift Valley / Red Sea flyway
- The project is being administered by Birdlife International working with national partners and a dedicated Birdlife Regional team: The Regional Flyway Facility; based in Amman and Nairobi.
- It is a UNDP GEF project




# Sensitivity mapping under the MSB project



# MSB sectoral guidance

**Migratory Soaring Birds Project**  
**Solar Energy Guidance for Developers**




**Factsheet on Birds and Solar Energy within the Rift Valley**  
*Draft document for consultation*

Solar Energy has great potential in the region and is thought to be the renewable energy source with the least amount of environmental risk. Like all infrastructure projects appropriate site location and the technology used is key to reducing adverse impacts. These impacts are likely to be associated with associated infrastructure and possibly panels, habitat loss, disturbance and fragmentation. Developers should:

- Consult a Strategic Environmental Assessment and bird sensitivity maps to guide any developments that are appropriate
- Recognise that appropriate site selection is key to minimising impacts
- Carry out a site specific EIA which includes appropriate ornithological surveys, including construction base line survey and three years' post-construction surveys
- Employ mitigation measures where adverse impacts are occurring
- Investigate whether habitat management at the site level could provide benefits for birds
- Commit to making ecological and bird data freely and publically available from a central database
- Engage with governments, utility companies, consultants and conservation organisations to ensure best available solutions are utilised
- Carry out environmentally friendly construction techniques and minimise environmental impacts

**Migratory Soaring Birds Project**  
**Wind Energy Guidance for Civil Society**




**Factsheet on Birds and Wind Farms within the Rift Valley/ Red Sea Flyway**  
*Draft document for consultation*

BirdLife International supports the transition to more renewable sources of energy. Wind energy is a key component of a green economy. We will continue to work with governments to ensure bird and biodiversity issues are considered in any plans for wind within the region however wind farms are likely to pose a significant risk to birds and biodiversity if inappropriately located. Any adverse impacts are likely to be associated with collision, disturbance and displacement effects. BirdLife Partners and Civil Society have an important role to play in reducing these risks and biodiversity by:

- Reviewing national legislation and planning procedures to identify opportunities for ensuring bird and biodiversity issues are considered in any
- Working with governments to ensure bird and biodiversity issues are considered in any SEAs and EIAs;
- Advocating for strong legislation and regulations in regards to SEAs and EIAs;
- Ensuring these assessments include ornithological considerations and reviewing the outcomes of these assessments
- Highlighting a precautionary avoidance approach for the location of wind farms where there are important areas for birds and biodiversity
- Communicating the benefits of sensitivity mapping tools in showing areas where bird and biodiversity are important
- Ensuring full Environmental Impact Assessment for all developments that include appropriate ornithological surveys ensuring they are being carried out to a high standard
- Reviewing ornithological surveys ensuring they are being carried out to a high standard
- Working with other interested organisations to ensure that biodiversity and bird conservation concerns are safe
- Engaging with donor banks to ensure that bird and biodiversity concerns are safe
- Ensuring that mitigation actions are appropriate and are being implemented and monitored
- Developing relationships with a wide range of groups including the private sector and civil society to ensure best practice examples and guidance materials with other civil society groups across the region
- Sharing best practice examples and guidance materials with other civil society groups across the region
- Calling for ecological information to be freely available and stored in a central database









**Migratory Soaring Birds Project**  
**Power Lines Guidance for Government**



**Factsheet on Birds and Power lines within the Rift Valley/ Red Sea Flyway**  
*Draft document for consultation*

Many bird species and populations potential face significant risks associated with power lines. These risks are associated with the impacts posed by collision, electrocution and disturbance/displacement effects as well as habitat impacts. Governments can minimise any adverse impacts on birds and biodiversity by:

- Reviewing and where appropriate revising legal and regulatory mechanisms to ensure birds and biodiversity are safeguarded
- Developing legislation and regulations which ensure the use of bird sensitive pole and line designs are utilised
- Carrying out strategic planning of power lines utilising the Strategic Environmental Assessment approach; consequences;
- Adhering to the precautionary avoidance approach and where impacts are likely to occur assess the consequences;
- Planning routes to avoid protected areas, IBAs and migratory bottlenecks and other sites identified as high risk;
- Develop and strengthen legislation in regards to the use of SEA and EIA;
- Ensuring that an EIA is carried out for each project, and that this includes ornithological assessments and post-construction monitoring;
- Further protection of areas of high biodiversity value or important sites for species;
- Committing to the publication of environmental and ecological data, generated as part of EIA and SEA that is freely available for review and consultation, and stored in a centralised information system;
- Engaging with a wide range of stakeholders to address any concerns, guaranteeing stakeholder consultation in SEA and EIA processes;
- Identifying areas of significant risk on existing infrastructure and start a retro-fitting programme;
- The regional sharing of good practice examples and information to reduce impacts and improve knowledge base on appropriate mitigation actions;
- Working with BirdLife Partners and other stakeholder groups who can identify important areas and provide guidance on mechanisms to reduce the adverse impacts on birds and biodiversity.

# Thank you.

BirdLife International

<http://www.birdlife.org/>

The RSPB

<http://www.rspb.org.uk/climate/>

The MSB project

<http://migratorysoaringbirds.undp.birdlife.org/>

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