# Renewable Energy and Biodiversity

Multi-stakeholder Platform for Protecting Biodiversity: Inception Meeting

**UN House – Beirut, Lebanon** 12 & 13 July 2023









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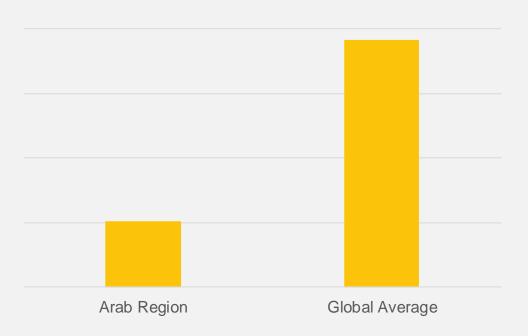
- Current status
- Major challenges
- Opportunities for action

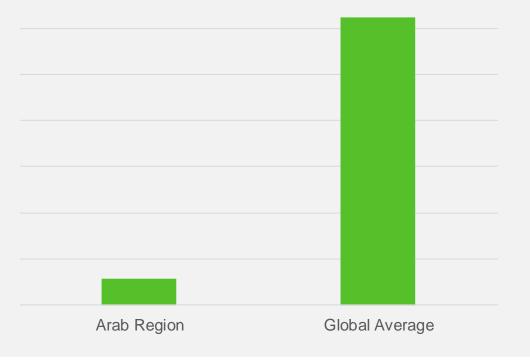


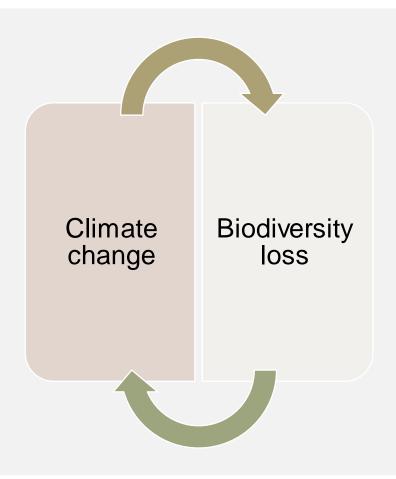
7.2.1 Renewable energy share in the total final energy consumption



15.1.1 Forest area as proportion of land area







# Both the sustainable energy transition and biodiversity conservation:

- Promote sustainable development
- Involve several stakeholders and agencies
- Recognize the importance of involving local communities
- Acknowledge the adoption of different approaches to scale up solutions from local to national to regional levels.





Renewable energy replaces fossil fuel





Getty images

Solar panels provide shade and reduce evaporation





Renewable energy on degraded lands





Agrivoltaics: co-developing the same land area for both solar PV and agriculture





Floating solar and offshore wind



Manufacturing of solar panels

Operation of hydropower plants

Decommissioning of wind turbines

Installation of electricity transmission lines

Raw materials extraction for RE technologies

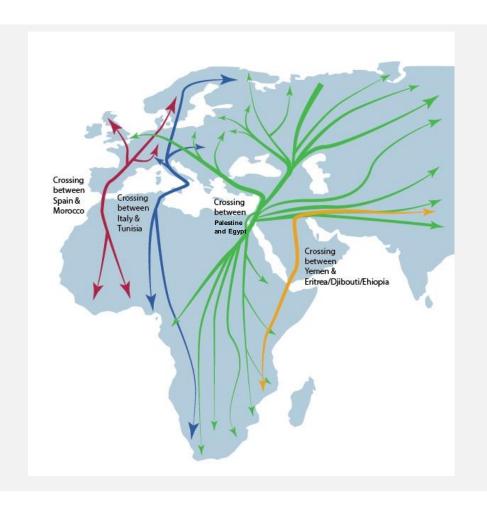
Waste disposal from manufacturing and recycling RE components

Mortality of endangered bird species from wind farms

Threat of overlap of sensitive areas with mining sites

Ingress of solar and wind farms into sensitive areas

Improper disposal in landfills disrupts ecosystems and lead to habitat destruction



The Arab region, located at the juncture of three continents, Europe, Asia and Africa, is the only overland bridge and acts as a giant natural funnel and a "bottle neck" for the migration of birds. More than 500 million birds pass over the region twice a year, in the autumn and spring migration.



Environmental impact of the disposal of components used in renewable energy technologies during their decommissioning and their recycling/up-cycling

# Guidelines for RE project developers to mitigate biodiversity impacts

- Early project planning and site selection
- Renewable energy development within protected areas should be avoided
- Working with stakeholders and indigenous peoples



## Opportunities for Action

### Opportunities for Action

Integrated Policies	Mainstreaming biodiversity conservation
National Action Plans	National plans with mechanisms for monitoring, reporting, and reviewing that are also compatible with increased renewable energy deployment
Adopting a mitigation hierarchy	A logical framework to address biodiversity impacts. The four sequential actions are Avoidance, Minimization, Restoration and Offsets. The first two prevent or reduce impacts, while the latter remediate impacts.
Application of overarching principles and good mitigation practices	Overarching principles to facilitate renewable energy expansion, while ensuring that biodiversity and ecosystem service risks are identified, accounted for, and effectively managed.
Financing	Investments and financing are critical for sustainable business models that protect biodiversity and ecosystem services.



# Thank you