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CMS

CONVENTION ON MIGRATORY SPECIES

UNEP/CMS/Resolution 11.27 (Rev.COP15)

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RENEWABLE ENERGY AND MIGRATORY SPECIES

Adopted by the Conference of the Parties at its 15th Meeting (Campo Grande, March 2026)

Recognizing the importance to society of an adequate and stable energy supply and that renewable energy sources can significantly contribute to achieving this, and aware that renewable power generation, especially from wind energy, large solar panel power stations, and biomass production, is projected by the International Energy Agency to triple by 2035,

Recognizing also that the rapid growth of renewable energy infrastructure affects many migratory species listed by CMS and other legal frameworks, and *concerned* about the cumulative effects of such infrastructure on the movement of migratory species, their ability to utilize critical staging areas, the loss and fragmentation of their habitats, and mortality from collisions with infrastructural developments,

Recalling Article III 4(b) of the Convention, which requests Parties to endeavour, *inter alia*, "to prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities, or obstacles that seriously impede or prevent the migration of species" and *noting* the relevance of this obligation to renewable energy developments, especially given that adverse impacts of renewable energy infrastructure can be substantially minimized through careful site selection and planning, thorough Environmental Impact Assessments (EIAs), including an appropriate ecological assessment if protected areas are likely to be affected, and good post-construction monitoring to learn from experience,

Recalling also previous decisions by CMS Parties and aware of those of other multilateral environmental agreements (MEAs), including CMS Agreements, as well as of relevant guidelines, on reconciling renewable energy developments with the conservation of migratory species, including:

- CMS Resolution 7.5 (Rev.COP12) *Wind Turbines and Migratory Species*,
- ASCOBANS Resolution 8.6 (Rev.MOP10) *Ocean Energy,*
- ASCOBANS Resolution 6.2 (Rev.MOP10) *Adverse Effects of Underwater Noise on Marine Mammals during Offshore Construction Activities for Renewable Energy Production*,
- ACCOBAMS Resolution 7.13 *Anthropogenic Noise* and the associated *Guidelines to Address the Impact of Anthropogenic Noise on Cetaceans in the ACCOBAMS Area*,
- AEWA Resolution 6.11 *Addressing Impacts of Renewable Energy Deployment on Migratory Waterbirds,* which urged Parties to implement the provisions of document AEWA/MOP 6.37 *Renewable Energy Technologies and Migratory Species: Guidelines for Sustainable Deployment,*
- AEWA Resolution 5.16 *Renewable Energy and Migratory Waterbirds,* which stressed the need to address or avoid adverse effects on migratory waterbirds and contains operational recommendations of relevance to many other migratory species,

- AEWA *Guidelines on How to Avoid, Minimize or Mitigate Impact of Infrastructural Developments and Related Disturbance Affecting Waterbirds* (*Conservation Guidelines No. 11*),
- EUROBATS Resolution 9.4 *Wind Turbines and Bat Populations* and *Guidelines for Consideration of Bats in Wind Farm Projects*, published as *EUROBATS Publication Series No. 6*,
- Bern Convention Recommendation No. 109 on minimizing adverse effects of wind power generation on wildlife and the guidance of 2003 on environmental assessment criteria and site selection issues related to wind-farming as well as the best practice guidance on integrated wind farm planning and impact assessment presented to the 33rd meeting of the Bern Convention Standing Committee in 2013,
- Ramsar Resolution XI.10 *Guidance for Addressing the Implications for Wetlands of Policies, Plans and Activities in the Energy Sector*,
- The European Commission's *Guidance document on wind energy developments and Natura 2000*[1], and
- The European Commission's *Guidance document on the requirements for hydropower in relation to EU nature legislation*,

and *recognizing* the need for closer cooperation and synergetic implementation amongst the CMS Family, the biodiversity-related conventions and other MEAs including the United Nations Framework Convention on Climate Change (UNFCCC) and relevant national and international stakeholders on decisions and guidelines to reconcile energy sector developments with migratory species conservation needs,

Acknowledging the critical need for liaison, communication, and strategic planning to be jointly undertaken by those parts of governments responsible respectively for environmental protection and energy development to avoid or mitigate negative consequences for migratory and other species and their habitats,

Further acknowledging the relationship of conservation of migratory species to national and international strategies on the implementation of the United Nations Sustainable Development Goals (SDGs) with special attention to SDG 7 on Energy, and SDG 13 on Climate Change, as well as within Nationally Determined Contributions (NDCs) to the Paris Agreement and national climate action plans,

Taking note of document UNEP/CMS/COP11/Inf.26 *Renewable Energy Technology Deployment and Migratory Species: an Overview*, which summarizes knowledge of actual and possible effects of renewable energy installations on migratory species, *noting* its conclusion that relatively few scientific studies are available on the short-term, long-term and cumulative impacts of renewable energy technologies, and *acknowledging* the urgent need for further research on the impact on migratory species of renewable energy technologies particularly in relation to ocean and solar energy,

Noting also that document UNEP/CMS/COP11/Inf.26 highlights the urgent need to collect data on the distribution of migratory species, their population size and migration routes as an essential part of any strategic planning and impact assessment, prior to and/or during the planning phase of development of renewable energy deployments, and also stresses the need to monitor regularly mortality arising from those developments,

[1] https://op.europa.eu/en/publication-detail/-/publication/2b08de80-5ad4-11eb-b59f-01aa75ed71a1

Welcoming the report, *Climate change and migratory species – a review of impacts, conservation actions, indicators and ecosystem services*, submitted as document UNEP/CMS/COP14/Inf.30.4.1, and *highlighting* its recommendation to undertake research on the impacts of human adaptations to climate change, including renewable energy infrastructure, on migratory species,

Noting relevant international decisions and guidance with regard to mitigating the specific impacts of power lines on birds, including:

- CMS Resolution 10.11[2] *Power Lines and Migratory Birds*,
- *Guidelines on How to Avoid or Mitigate the Impact of Electricity Power Grids on Migratory Birds in the African-Eurasian Region*, adopted by CMS COP10, AEWA MOP5 and the CMS Raptors MOU MOS1,
- AEWA Resolution 5.11 *Power Lines and Migratory Waterbirds*,
- Bern Convention Recommendation No. 110 *minimizing adverse effects of above-ground electricity transmission facilities (power lines) on birds*,
- The Budapest Declaration on Bird Protection and Power Lines, adopted in 2011 by the Conference on Power Lines and Bird Mortality in Europe,
- BirdLife/UNDP/GEF *Guidance on appropriate means of impact assessment of electricity power grids on migratory soaring birds in the Rift Valley / Red Sea Flyway*,
- The European Commission's *Guidance document on energy transmission infrastructure and EU nature legislation,*[3] and
- The declaration and outcomes of the Global Flyways Summit in Abu Dhabi, United Arab Emirates, April 2018, related to Energy Infrastructure,

Welcoming the good cooperation and partnerships already established at both international and national levels between stakeholders including governments and their institutions, energy companies, non-governmental organizations (NGOs) and secretariats of MEAs, and the concerted efforts made to address energy developments which conflict with species conservation, and

Acknowledging with thanks the financial support of the Governments of Germany and Norway through the CMS and AEWA Secretariats, of BirdLife International through the BirdLife UNDP/GEF Migratory Soaring Birds project and of The International Renewable Energy Agency (IRENA) towards the compilation of the report *Renewable Energy Technology Deployment and Migratory Species: an Overview* and the guidelines document *Renewable Energy Technologies and Migratory Species: Guidelines for Sustainable Deployment*,

The Conference of the Parties to the
Convention on the Conservation of Migratory Species of Wild Animals

1. *Endorses* the document *Renewable Energy Technologies and Migratory Species: Guidelines for Sustainable Deployment* (UNEP/CMS/COP11/Doc.23.4.3.2);

[2] The resolution was amended at COP13.
[3] https://op.europa.eu/en/publication-detail/-/publication/82e2011b-be3e-11e9-9d01-01aa75ed71a1

2. *Urges* Parties and non-Parties to implement these voluntary Guidelines as applicable depending on the particular circumstances of each Party, and to:

   a) apply appropriate, Strategic Environment Assessment (SEA) , sensitivity mapping and EIA procedures, including an appropriate ecological assessment if protected and sensitive areas in particular for migratory species are likely to be affected, when planning the use of renewable energy technologies, avoiding existing protected areas in the broadest sense and other sites of importance to migratory species and encouraging that data from SEA, EIA and postconstruction monitoring are made publicly available;

   b) prioritize the establishment of renewable energies in areas where power lines already exist in order to avoid additional potential impacts on migratory species;

   c) undertake appropriate surveying and monitoring both before and after deployment of renewable energy technologies to identify impacts on migratory species and their habitats in the short- and long-term, as well as to evaluate and assess the effectiveness of mitigation measures, making modifications where necessary;

   d) require data sharing and enhance availability of biodiversity data, survey results and pre- and post-construction monitoring, by making the data publicly available in a centralized database, including data on species mortality due to renewable energy infrastructure;

   e) enact appropriate legislation, licensing and permitting procedures that are evidence- based, integrate biodiversity and migratory species considerations, and include clear procedures to address cases of noncompliance or permit violations;

   f) apply appropriate cumulative impact studies to describe and understand impacts on a larger scale, such as at population level or along entire migration routes (*e.g.,* at flyways scale for birds);

   g) promote continued dialogue and cooperation between all stakeholders in the search for best practice to avoid or minimize the adverse impact of renewable energy generation;

   h) integrate biodiversity and migratory species considerations into national energy and climate policies, action plans, and regulatory frameworks governing the siting of new energy infrastructure;

   i) mitigate impacts from existing energy infrastructure where necessary, making use of guidance developed by the CMS Energy Task Force and other relevant platforms; and

   j) integrate relevant considerations into planning, such as Nationally Determined Contributions and National Biodiversity Strategies and Action Plans, and incorporate Strategic Environmental Assessments and species sensitivity mapping into decision-making processes and national targets.

3. *Urges* Parties to implement, as appropriate, the following priorities in their development and deployment of renewable energy and transmission technologies:

   a) **wind energy**: to undertake science-based strategic planning and monitoring for the safe siting and management of renewable energy development projects alongside reducing and mitigating the impacts of disturbances and displacement of species, including during construction work, and to minimize the mortality of birds (in particular of species that are long-lived and have low fecundity) and bats resulting from collisions with wind turbines and barotrauma, and the increased mortality risk to cetaceans from permanently reduced auditory functions, as detailed in the guidance document *Renewable Energy Technologies and Migratory Species: Guidelines for Sustainable Deployment* (UNEP/CMS/COP11/Doc.23.4.3.2);

b) **solar energy**: to avoid protected areas and respect important areas for biodiversity identified at the national level, land covered with semi-natural or natural habitats and, as far as possible, Key Biodiversity Areas so as to limit further the impacts of deploying solar power plants; undertake careful planning to reduce disturbance and displacement effects on relevant species, and prioritize development on existing infrastructure and urban areas as well as to minimize the risks of solar flux, trauma and other related injuries, such as singeing, which could be a consequence of a number of solar energy technologies; in places where there is a need to clean solar panels such as deserts, avoid usage of scarce resources like water and consider to deploy other technologies for this purpose; minimize extraction of water from wetlands for cooling solar panels to avoid habitat modification;

c) **ocean energy**: to support avoiding protected areas and respect Important Marine Mammal Areas, and give attention to possible impacts on migratory species, including injury, displacement, and increased noise and electromagnetic field disturbance especially during construction work;

d) **hydro-power**: to undertake measures to reduce or mitigate known serious impacts on the upstream and downstream movements of migratory aquatic species, such as through the installation of mitigation measures such as fish passageways or adaptive operations mode and the conservation of regularly flooded areas as nursery and feeding areas nearby the hydroelectric dam; and

e) **geo-energy**: to avoid habitat loss, disturbance and barrier effects in order to continue to keep the overall environmental impacts at their current low level.

4. *Instructs* the Secretariat to convene a multi-stakeholder *Task Force on Reconciling Selected Energy Sector Developments with Migratory Species Conservation* (the Energy Task Force);[4]

5. *Urges* Parties and *invites* the United Nations Environment Programme and other relevant international organizations, bilateral and multilateral donors as well as representatives of the energy industry to financially support the operations of the *Task Force on Reconciling Selected Energy Sector Developments with Migratory Species Conservation* (Energy Task Force), including through funding for its coordination, implementation of its Programme of Work and provision of financial assistance including but not limited to developing countries for the exchange of relevant knowledge of capacity-building, and development and the implementation of relevant guidance;

6. *Instructs* the Secretariat to report on progress on behalf of the Energy Task Force, including the implementation and, as much as possible, the assessment of the efficacy of measures taken, to each meeting of the Conference of the Parties; and

7. *Encourages* Parties and relevant entities to develop national or regional level multi-stakeholder forums and networks to promote energy-migratory species discourse as a way of accelerating sharing of evidence-based best practices, experience and uptake of guidelines adopted for safeguarding migratory species, potentially with support of the CMS Energy Task Force.

[4] The Task Force was established after the Eleventh Meeting of the Conference of the Parties.

Annex to the Resolution

TERMS OF REFERENCE FOR THE MULTI-STAKEHOLDER TASK FORCE ON RECONCILING SELECTED ENERGY SECTOR DEVELOPMENTS WITH MIGRATORY SPECIES CONSERVATION (*ENERGY TASK FORCE*)

1. Background and purpose

The Energy Task Force is convened in line with the mandate provided by CMS Resolution 11.27 (Rev.COP15) *Renewable Energy and Migratory Species* to assist Parties or Signatories to CMS, AEWA, EUROBATS, ASCOBANS, ACCOBAMS, the Raptors MOU, the Bern Convention, the Ramsar Convention and other relevant MEAs to fulfil their obligations with regard to avoiding or mitigating possible negative impacts of energy sector developments on migratory species.

2. Goal

All energy sector developments are undertaken in such a way that negative impacts on migratory species are avoided.

3. Role

The role of the Energy Task Force will be to facilitate the involvement of all relevant stakeholders in the process of reconciling energy sector developments with the conservation of migratory species where all developments take full account of the conservation priorities.

4. Scope

The geographical scope of the Energy Task Force will be global. Initially, it will be convened with an African-Eurasian scope although not excluding relevant cases in progress from other regions and will gradually expand to other parts of the world. The timing and extent of geographic expansions shall be decided by the Energy Task Force members and shall depend on funding being available.

The Energy Task Force will cover all migratory taxa as identified by CMS and its associated instruments. Initially, the Energy Task Force will focus on migratory birds and will gradually expand to other taxonomic groups. The timing and extent of taxonomic expansions shall be decided by the Energy Task Force members and shall depend on funding being available.

The Energy Task Force will cover the issues of power line impacts and impacts of renewable energy technology deployments (wind, solar, hydropower, geothermal, biomass and ocean energy) with initial focus on power lines, hydro, wind and solar energy technologies. Proposals for extension of the types of energy sector developments to be covered may be made and shall be considered by the Energy Task Force and shall depend on funding being available.

5. Remit

The Energy Task Force will:

5.1 promote implementation of the relevant guidelines adopted in the frameworks of the participating MEAs;

5.2 set priorities for its actions and implement them;

5.3 assist in resource mobilization for priority actions, including from the energy industry;

5.4 monitor the implementation of relevant guidelines and their effectiveness, as well as existing impediments for adequate implementation of such guidelines, and submit progress reports to the governing bodies of the participating MEAs;

5.5 stimulate internal and external communication and exchange of information, experience, best practice and know-how;

5.6 strengthen regional and international networks; and

5.7 stimulate more research for the renewable energy technologies deployment where substantial gaps in knowledge have been identified in the *Review Report* (UNEP/CMS/COP11/Inf.26).

6. Membership

The Energy Task Force is open-ended. Its member organizations will comprise the Secretariats of the participating MEAs, representatives of relevant government institutions in the field of environment and energy in the Parties to the participating MEAs, representatives of the energy industry, relevant academic institutions, NGOs and other interested stakeholders.

7. Governance

The Energy Task Force will:

7.1 operate by seeking consensus, as much as possible, among the group;

7.2 once it has been convened, operate in accordance with a *modus operandi*, which shall be established by its members; and

7.3 report to the CMS Conference of the Parties and governing bodies of the other participating MEAs, as requested by them.

8. Operation

Funding permitting, a coordinator will be appointed from the Energy Task Force members under an arrangement with the CMS Secretariat to support the Chair, the Vice-Chair and the Energy Task Force members, as appropriate.

The coordinator will *inter alia*:

- organize the meetings of the Energy Task Force;
- maintain and moderate the Energy Task Force communication platform (website and internal online workspace);
- facilitate implementation of decisions of the Energy Task Force, as necessary;
- facilitate fundraising and resource mobilization in support of the activities of the Energy Task Force; and
- facilitate engagement with stakeholders within and beyond the Energy Task Force.

Meetings of the Energy Task Force will be convened at appropriate intervals, as considered necessary and funding permitting. Between business meetings will be conducted electronically through an online workspace within the Energy Task Force*'s* website, which will provide the primary mode of communication and operation of the Energy Task Force.

9. Financing

Funding for the operations of the Energy Task Force, including the coordinator post, as well as the implementation of identified priorities will be sought from various sources, including from member organizations.