Resolution No. 6:

Ocean Energy

Recalling that the Conservation and Management Plan annexed to the Agreement stipulates that ASCOBANS should work towards "the prevention of other significant disturbance";

Aware that ocean wind, waves, tides and temperature differences result in movement of water creating a vast store of kinetic energy;

Recognizing that ocean energy can be harnessed to generate electricity, and that together with offshore wind turbines these technologies form an important component of the efforts to supply human energy needs from renewable sources in order to combat climate change;

Stressing the importance of making use of renewable energy sources in a way that does not have a harmful impact on biological diversity and the marine environment;

Noting that displacement, injury and mortality of individuals may also affect the long-term status of animal populations, as identified in a recent study of harbour porpoises and wind farms in the North Sea undertaken by the Netherlands;

Recalling Resolution No. 2 of MOP6 on Adverse Effects of Underwater Noise on Marine Mammals during Offshore Construction Activities for Renewable Energy Production and Resolution No. 4 of MOP5 on Adverse Effects of Sound, Vessels and Other Forms of Disturbance on Small Cetaceans:

Further recalling related decisions adopted by the Conference of the Parties to CMS, in particular Resolution 9.19 on Adverse Anthropogenic Marine/Ocean Noise Impacts on Cetaceans and other Biota and Resolution 10.24 on Further Steps to Abate Underwater Noise Pollution for the Protection of Cetaceans and Other Migratory Species;

Further recalling the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development adopted in September 2015, and especially Goal 14 to Conserve and sustainably use the oceans, seas and marine resources, which includes the following targets:

- By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution;
- By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans;
- Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries;

Noting the recommendations contained in the Report of the IWC Workshop on Interactions between Marine Renewable Energy Projects and Cetaceans Worldwide;

Concerned that there is a high degree of uncertainty regarding quantifying risks from ocean energy production for marine life, including cetaceans;

Further concerned that apart from lethal interactions or injury including to the auditory system, negative impacts on cetaceans could include displacement and changes in parameters such as fecundity, calf survival and juvenile and adult mortality;

Emphasizing that the difficulty of predicting and assessing detrimental effects on cetaceans necessitates a precautionary approach in dealing with this issue, taking into account both local and global short- and long-term consequences of decisions for or against deployment;

Welcoming the efforts of Parties and industry to investigate risks and robustly monitor and mitigate them in order to ensure sustainable energy production, including from a conservation perspective;

Noting also other related resolutions adopted at this meeting, in particular Resolution No. 9 on Managing Cumulative Anthropogenic Impacts in the Marine Environment and Resolution No. 11 on CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities;

The Meeting of the Parties to ASCOBANS

- 1. *Expresses* its concern about the potential for adverse effects of ocean energy on cetaceans during both construction and operational phases;
- 2. States its concern that more recent technologies, such as those harvesting tidal and wave energy, also referred to as marine renewable energy, present a number of potential risks to cetaceans in addition to the introduction of noise, including collisions, and that the magnitude of these risks is so far poorly understood;
- 3. Calls on Parties to coordinate and support research investigating the risk to cetaceans from marine renewable energy production, in particular during the operational life-time of the installation, regarding:
 - (a) collisions, in particular with moving parts such as rotor blades, including observations of animal behaviour in the vicinity of devices, such as evasion, avoidance or attraction and modelling to calculate the likelihood of strikes, including with increasing numbers of devices in arrays;
 - (b) effects of underwater noise, noting that while the introduction of additional sound sources into the marine environment can have detrimental effects, it can also potentially protect animals from strikes;
 - (c) habitat alteration, such as changes in hydrodynamics, sediment dynamics and ecosystem interactions;
 - (d) other potential risks, such as pollution from paint and lubricants;
- 4. *Urges* Parties to ensure appropriate baseline assessments of habitat use prior to the onset of related exploration or construction;
- 5. Further urges Parties and *invites* industry to make full use of the experience gained from early development projects to understand environmental risks and animal responses, to monitor effects of ocean energy production on protected species and their habitats, to develop

appropriate mitigation strategies for unavoidable impacts on the environment and biodiversity, and to develop alternative and new technologies preventing threats;

- 6. Further urges Parties to ensure that thorough environmental impact assessments are carried out addressing all aspects relevant to the conservation of protected species and their habitats prior to development of pilot-scale as well as commercial-scale deployments, and that such assessments take into account both the construction and the operational phase, as well as cumulative impacts from other anthropogenic activities in the area;
- 7. Further urges Parties to make full use of marine spatial planning in order to choose the most appropriate siting for ocean energy production, paying particular regard to protecting critical habitat, including migration corridors;
- 8. Requests the Advisory Committee to continue monitoring new information on negative as well as positive effects of ocean energy with regard to cetaceans and to make recommendations to Parties as appropriate concerning:
 - (a) effects of static structures on cetacean habitat;
 - (b) risk and occurrence of animal strikes, likely to lead to injury or mortality;
 - (c) behavioural changes, such as avoidance of or attraction to the source and distances at which animals take action to avoid potentially injurious encounters;
 - (d) masking of communication, navigation and detection of prey;
 - (e) effects of altered or additional sources of electromagnetic fields in the marine environment on cetaceans and their prey;
 - (f) disturbance through activities related to site identification, construction, operation and servicing of the structures required for ocean energy production;
 - (g) relative risks associated with different types of device and mitigation options;
 - (h) the nature of additive effects of multiple devices in arrays beyond those produced by single devices;
 - (i) cumulative and in-combination effects arising from the construction and operation of individual and multiple renewable energy sites and other anthropogenic and natural pressures, including climate change;
- 9. Further requests the Advisory Committee and the Secretariat to collaborate with other organizations working on or potentially interested in this issue, such as UNEP, HELCOM, OSPAR, ACCOBAMS, IWC, ICES and the European Commission;
- 10. *Invites* other organizations working on issues related to ocean energy production to take full account of the impacts on protected species and their habitats, and to mitigate and minimize any such impacts to the fullest degree possible; and
- 11. Reaffirms Resolution No. 2 of MOP6 (2009) on Adverse Effects of Underwater Noise on Marine Mammals during Offshore Construction Activities for Renewable Energy Production, as well as Resolution No. 4 of MOP5 (2006) on Adverse Effects of Sound, Vessels and Other Forms of Disturbance on Small Cetaceans.