

	OFFSHORE WIND ENERGY			
	Potential type of DIRECT impact		Potential type of INDIRECT impact	
	Negative	Positive	Negative	Positive
CONCEPT	- Ecological disturbance from pre-construction surveys	- Opportunity to implement advanced offset or enhancement actions	- Reduced ecotourism investment in expectation of project development impacts - Increased fishing pressure in expectation of reduced future access	- Opportunity to promote marine spatial planning
PLANNING	- Marine traffic can displace marine creatures or even kill them		- The expansion of historical harbours to house exploration boats can affect cultural heritage values	
CONSTRUCTION	- Seabed habitat loss or degradation - Wildlife death, injury, disturbance or displacement from construction noise, boat traffic and night lighting - Introduction of alien invasive species	- Advanced implementation of invasive species management	- Supply chain and manufacturing impacts - Displacement of fishing or other activities	- Opportunity to implement improved fisheries management - Opportunity for increased local employment
OPERATION	- Bird and bat fatalities from collisions with turbine blades (risk is species-specific) - Disruption of bird migration and	- Onsite biodiversity enhancement and nature-inclusive design.	- Displacement of fishing or other activities	- Reduced carbon footprint - Contribution to addressing

	fatalities from attraction to lights on infrastructure - Behavioural displacement (species-specific) leading to effective loss of habitat and changes in ecological communities - Hydrodynamic changes and alterations in benthic ecology - Disruption of bird migration and fatalities from attraction to lights on infrastructure - Shadow flicker, infrasound, noise pollution and light pollution from night lighting - Obstructed views and visual intrusions	- Onsite biodiversity enhancement and nature-inclusive design - Protection from fishing or other activities		the global climate emergency
REPOWERING	- Wildlife death, injury or displacement from vessel collision and disturbance - Increased collisions or displacement due to taller turbines - Ecological/environmental disturbance during infrastructure replacement	- Improved layout with flight corridors for birds enabled by fewer, larger turbines	- Ecological impacts from transport and break-up of replaced turbines	- Increased production of low-carbon energy - Reuse of materials from replaced turbines
DECOMMISSIONING	- Ecological/environmental disturbance during infrastructure removal	- Continued presence of artificial reefs from marine structures left in place	- Ecological impacts from transport and break-up of removed turbines	- Reuse of materials from removed turbines
RECOVERY				

(Please note that these lists are intended only to provide examples and are by no means exhaustive. For the question of assessing visual impacts, see [‘Note 4’](#))