

Name	Phase	Seabasin	Location	Location Name	Wind Farm type	Lead	Timeframe	Target species	Target habitat	Technological readiness level	Project description/approach	Monitoring date and methods	Results – lessons learned in project on restoration	Knowledge gaps left / recommendations	Possible negative effect	Sources	Credits
Minimizing Inter-array Cabling by Optimal Offshore Converter Station Siting	Planning/design	North Sea	Netherlands	Offshore Wind Farms	Offshore windfarm (bottom fixed)	TenneT	2021	Various		Implemented	Strategic placement of converter stations reduces cable lengths and vessel trips.	Compliance monitoring.	Reduced seabed disturbance and lower cable costs.	Future assessments on optimal station layouts for minimal cabling.	Potential constraints in highly congested maritime zones.		OCEaN mitigation database
Use of Inert Materials for Cable Protection	Planning/design	North Sea	EU	Multiple offshore wind farm projects	Offshore windfarm (bottom fixed)	Industry-wide		Marine life, seabed habitats		Implemented	Rock placement or concrete mattresses used for cable protection should consist of inert materials that do not undergo harmful chemical modifications.	Compliance with EU environmental regulations.	Minimized chemical pollution risks from construction materials.	Research on chemical pollution from corrosion protection, microplastics, or spills is limited and should be expanded.	Potential increase in material costs; long-term impact of inert materials on seabed ecology.	Debat public - Dossier du maître d'ouvrage (Sept 2023 - Jan 2024)	OCEaN mitigation database
Reducing Maintenance Vessel Trips	Operational	North Sea	UK	Galloper Wind Farm	Offshore windfarm (bottom fixed)	RWE	2022-2027	Various marine species		Implemented	Reduced frequency of maintenance vessel trips to minimize disturbance to local ecosystems	Monitoring of maintenance vessel impact on marine life	Reduction in vessel trips has led to lower disruption of marine habitats	Further reductions in vessel operations may be possible with additional research	Still some disturbance from occasional maintenance vessel activity		OCEaN mitigation database
Planned:																	
EOLMED		Mediterranean Sea		Gruissan - Pilote Wind Farm	Floating	Qair Marine	2016 - 2025 (planned operation start)	Various	Various		Various mitigation measures are planned including: Orientate the turbines in the way of bird displacement, align the turbines parrallel to the coast and to barymetrique lines, reduce the lighting during construction phase, acoustic repulsion of birds if they get too close from the turbines, and stop of the turbines during sensitive time of the year (high bird migration probability for instance)	Not mentioned	NA	NA			https://www.eib.org/en/projects/all/20180688
Eoliennes du Golfe du Lyon		Mediterranean Sea		Leucate Pilote Wind Farm	Floating	Engie,EDP renewables, Caisse des Dépôts	2016 - 2025 (planned operation start)	Various	Various		Mitigation measures proposed by the environnemental impact study: Use a color painting for the turbine to limit visual disturbance from coast	Not mentioned	NA	NA	Probably problematic for the birds as it will increase the collision risk		https://www.eib.org/en/projects/pipelines/all/20180690
Provence Grand Large		Mediterranean Sea		Fos - Pilote Wind Farm	Floating	EDF EN	2016 - 2025 (planned operation start)	Various	Various		Mitigation measures proposed by the environnemental impact study: Stop of the turbines up to 50 hours a year in periods that a risky for the birds (migration or meteorological condition that makes birds fly lower fir instance)	Not mentioned	NA	NA			https://www.eib.org/en/projects/pipelines/all/20180691
Various project planned within the LEBA 1 zone in Catalunia		Mediterranean Sea		LEBA 1	Floating	Various		Various	Various		Various mitigation measures are planned depending on the promoters, including: Horizontal Directional Drilling (HDD) to limit the impact of construction on the environnement (especially impact on Cymodocea nodosa), implementation of a system to detect cetaceans around during construction and stop the work if they are too close, use of radars on the turbines to detect the birds/bats and use of acoustic repulsion to limit collision risk, slow down the turbines or turn them off completly, use of bubble curtain to limit the noise during construction, painting the turbines to increase the contrast with the sky to reduce collision risk with the avifauna.	Not mentioned	NA	NA			