

## **Enel biodiversity projects**

COUNTRY	MAIN PROJECTS	POWER PLANT	ACTIVITIES	OBJECTIVE	IUCN RED LIST¹ SPECIES AFFECTED BY PROJECTS
ITALY	Project to move nests to protect birdlife from electrocution	LV / MT electricity network	In particular, to reduce the impact of power lines on birdlife, it puts in place numerous initiatives throughout the country. The interventions in favor of the storks are among the most frequent since they often choose the pylons of the BT / MT network as a place to nest. However, supports are not always safe places for large birds: birds can in fact run the risk of electrocution due to accidental contact with active parts of the line.	Birds protection	Ciconia ciconia (LC)
	Infrastructure & Networks  – Conservation of birds of prey		In addition to the LIFE project for the conservation of the Egyptian vulture, in the Tepilora park in Sardinia E-distribution has made changes to its plants (e.g. the replacement of some switches and the insulation of the conductors near the supports of the electric networks) to contribute to the success of the reintroduction program of Bonelli's Eagle.	Protection of protected species against the risk of electrocution	Egyptian Vulture (EN), Neophron percnopterus majorensis (EN)
	LIFE15NAT/ IT/000823 IdroLIFE Project "Protection of natural resources and biodiversity in Verbania - Cusio Ossola (VCO)" (Piemonte)	Hydroelectric Power plant - Dronero	Restoration of the continuity of the aquatic corridors of some stretches of the Toce River and San Bernardino River; construction of a publicly owned incubator aimed at conservation actions of the target species of project; improvement of the conservation status of fish species of European interest; conservation of freshwater prawns; reduction and control of the spread of invasive alien species (torpedo, catfish, acerin, sun perch, carassium, exotic salmonids.  https://idrolife.eu/il-progetto/	Restoration of habitats and protection of species affected by hydroelectric plants	Salmo marmoratus (LC), Rutilus pigus (LC), Chondrostoma soetta (EN), Cottus gobio (LC), Telestes muticellus (LC), Austropotamobius pallipes (EN)
	Public lighting	Public lighting systems in the municipalities of Barrea and Villetta Barrea	Environmental Impact Assessment with the function of verifying the possibility that the implementation of a plan / project, in a site inside the National Park of Abruzzo, Lazio and Molise, do not create significant effects on the conservation objectives of the site itself. Installation of apparatus with a color temperature of 3000K and a light adaptive system to dim the light fluxes emitted from the apparatus as a function of the actual presence of vehicular and pedestrian traffic	Ensure the conservation and maintenance of the optimal conditions of the habitat of some colonies of bats present in the area, species protected and considered at risk in the Italian Red List	Rhinolophus hipposideros (NT), Rhinolophus ferrumequinum (NT)

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ROMANIA	Protecting the white stork by mounting supports for nests in E-Distributie Romania	E-Distributie Banat, E-Distributie Dobrogea, E-Distributie Muntenia	Mounting supports for stork nest on the LV network is an activity started long time ago in electricity distribution companies from Banat and Dobrogea areas. Between years 2010-2019, were install in total 745 supports for stork nests: 472 at E-Distributie Banat, 266 at E-Distributie Dobrogea, and 7 in E-Distributie Muntenia. Besides the fact that constantly are been mounted supports for stork nests, E-Distributie Romania is implicated in other activities which involves stork protection.  - paying attention at the special requests of local communities from different areas, E-Distributie network personnel is mounting metal supports for storks;  - collaborating with NGO (SOR- Romanian Ornithological Society and MILVUS) for ringing stork chicks that are still in the nests. In 2019 our colleagues, together with the ornithologists from SOR, performed in Tulcea area the ringing of 61 white chickens stork launch of the mobile application "Look Barza!", application which is developed by the Romanian Ornithological Society with the support of Enel companies from Romania and has reached over 9,000 users.	The project aim was to carry out the census of white storks in Romania, identifying in the same time areas with high risk of electrocution for storks.	Ciconia ciconia (LC)
	Project monitoring the bird life in nest, with online video camera	Banat and Dobrogea areas.	Following the collaboration started in 2015 with the association Wild Watch, the colleagues from E-Distributie Banat have mounted in 2019 a new video camera that transmits online the life of certain predatory birds - the saker falcon or the red-footed falcon - depending on who manages to take control of the nest mounted on a pole of a high voltage line in Timi County (Romania). Now, in 2020 the nest is occupied by a pair of saker falcon, which probably in very short time will lay their eggs. This is one of the 34 artificial nests mounted by E-Distributie Banat in the period 2012-2014, through the Life + project of conservation of the saker falcon, project developed in collaboration with Milvus Group Association, in the Western Plain. The activity of the "inhabitants" of the nest can be followed, live, on the website Wildlife Romania.  The saker falcon, also called the sacred falcon, is a species with a seriously declining population globally and in Romania can only be found in Banat and Dobrogea areas.	Birds protection	Falco cherrug (EN), Falco vespertinus (NT)
	Infrastructure and Networks: DANUBEparksCONNECTED		E-Distributie Dobrogea is Associated Strategic Partner in the project DANUBEparksCONNECTED. 11 countries involved Austria, Germany, Slovakia, Hungary, Croatia, Bulgaria, Serbia, Moldova, France, Ukraine, Romania. The project consist in inventorying of overhead lines of E-Distributie Dobrogea, that are in Danube Delta Biosphere Reserve, pre-monitoring actions, pilot activities to mark major electric lines crossing the Danube, against collision and electroconvulsive concepts, post - monitoring activities. The project has been approved by the EU-Interreg Danube Transnational Programme.  In 2019 Enel participated to the international conference on bird conservation "LIFE DANUBE FREE SKY" Project from Tulcea, organized by ARBDD (Danube Delta Biosphere Reserve Administration) – last step of the project."	Protection of birdlife against the risk of electrocution	

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SPAIN	Conservation of bats protected species in Endesa hydroelectric plants (ENDESABATS)	Hydroeletric power plants	The Endesabats project aims to conserve the bats that live in the roof spaces of the hydroelectric plants. With the Endesabats Project, and working with experts from the Laboratorio de Biodiversidad y Conservación Animal del Centre Tecnològic Forestal de Catalunya (Biodiversity and Animal Conservation Laboratory at the Catalan Forestry Technology Centre), the project aim to gain more knowledge and improve conservation of cave-dwelling bats, their ecological requirements and how they affect hydroelectric power station operations.	Conservation of Endangered Species of Bats at Endesa Hydroelectric Power Stations (ENDESABATS)	Rhinolophus hipposideros LC, Myotis capaccinii VU, Rhinolophus euryale NT (VU Europe), Myotis bechsteinii NT (VU Europe), Miniopterus schreibersii NT, Nyctalus lasiopterus VU, Barbastella barbastellus NT (VU Europe), Rhinolophus ferrumequinum LC (NT Europe), Myotis emarginatus LC, Myotis blythii LC, Myotis myotis LC, Nyctalus noctula LC, Myotis mystacinus LC, Myotis daubentonii LC, Pipistrellus nathusii LC, Plecotus auritus LC, Plecotus macrobullaris LC
	Hermann's tortoise (Testudo hermanni) reintroduction in Lleida region (Catalonia).	Hydroelectricity generation and distribution	Conditioning fenced grounds and habitat restoration to obtain the optimal conditions to release the firsts Mediterranean tortoise specimens (Testudo hermanni), in collaboration with the Centre for Recovery of Amphibians and Reptiles of Catalonia (CRARC). The project is being developed with TRENCA NGO and CRARC in an area of 30 ha (owned and managed by TRENCA) where a sustainable agri-environmental development project is carried out, allowing a continuous surveillance and control.	The project has as main objective the creation of a new nucleus of population, by releasing tortoises (previously marked and photographed), in the municipality of "La Bovera" (Les Garrigues) which is a representative area of Mediterranean ecosystem. At the same time, the project is supporting reintroduction of Hermann's tortoise in Montsant Natural Park (7,6 km away) and the conservation of the species in Catalonia.	Testudo hermanni EN
CHILE	Reforestation with native species at the Ralco plant	Hydroeletric power plants	The Reforestation Project is part of the compensation measures established in the Resolution of Environmental Qualification of the Ralco Hydroelectric Power Plant. The project considers the development of Scientific Research Activities to evaluate the recovery of ecosystem services.	700 hectare reforestation with native species	Nothofagus obliqua, Nothofagus alpina, Nothofagus dombeyi (IUCN Least Concern)
	Solar – Conservation of reptile habitats	Chanares power plant	Semestral monitoring of the use of shelters built for the benefit of local reptile species	Habitat restauration	Liolaemus atacamensis LC

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COLOMBIA	Ecological forest restoration plan in hidroelectrical project "El Quimbo"	Hidroelectrical project "El Quimbo"	The project first phase (2014-2018) comprised: the pilot plan restoration of 140 hectares and the definition of the best ecological restoration strategies and species. A new species of bromeliad Pitcairnia huilensis was described and 600 individuals planted. The project second phase (2018-2021) will restore 500 hectares of Dry Forest and will require the propagation, growing and maintenance of 478.000 plants of at least 40 different species. The second phase also includes communication and capacity building measures to support information dissemination.	Restoration of Tropical Dry Forest (11079 ha) providing connectivity, buffering, and proper management of threatened species and the whole biota of the ecoregion. Such arrangements will also improve the provision of forest ecosystem services.	Pteronotus parnellii EN, Saguinus leucopus EN, Ichthyoelephas longirostris VU, Leopardus trigrinus VU, Mazama rufina VU, Aotus brumbacki VU, Cedrela odorata VU, Lontra longicaudis NT, Psittacara wagleri NT, Contopus cooperi NT, Sapajus apella LC, Leopardus pardalis LC, Tamandua mexicana LC
BRAZIL	Solar – Monitoring of herpetofauna, mammal, hymenoptera at the solar plant of Ituverava	Solar plant of Ituverava	Studies, through observations, of the direct and indirect effects of solar systems on reptiles, amphibians, small mammals and hymenoptera	Study for determining the indirect and direct impacts	Leopardus tigrinus (VU), Lycalopex vetulus (VU), Chrysocyon brachyurus (NT)

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