

Good Practice Awards 2022

The corridors of biodiversity by Red Eléctrica's transmission grid, recognised for good practice at European level

The European platform Renewables Grid Initiative awards a prize to 'Bio Transport', the research project by Red Eléctrica and the CSIC that highlights the grid's capacity to favour the protection of animal species against climate change

The EU Commissioner for Energy draw attention to the effort made by the winners in "taking account of the environment, technology and communities in the design and construction of energy infrastructure projects"

Madrid, September 19, 2022

The European platform Renewables Grid Initiative (RGI) has recognised in the Good Award 2022 the research project 'Bio Transport' developed by Red Eléctrica and the CSIC that evidences the electric transmission grid's capacity to favour the creation of new habitats for some animal species as a mechanism to ensure their survival in view of global warming.

In addition, RGI has, in turn, given a special mention to the jury in the Communication and Commitment category to the dissemination of the Electric Planning 2021-2026. It is not the first time RGI awards Red Eléctrica. Last year, a special mention was given to the project 'Pastoreo en Red', a pioneering experience in the control of vegetation under high-voltage power lines with extensive livestock farming, considered to be a nature-based solution according to the Spanish International Group for the Preservation of the Environment (Unión Internacional para la Conservación de la Naturaleza).

EU Commissioner for Energy, Kadri Simson, was in charge of handing over the awards in a ceremony framed within the European Commission's PCI Energy Days. During the event, she stated that "yet again in 2022, grid promoters have stood up amidst the multi-fold crisis and excelled in how they have taken account of the environment, technology and communities in the design and construction of energy infrastructure projects."

Renewables Grid Initiative, a platform promoting the integration of renewable energies in electricity transmission grids in Europe, has rewarded Red Eléctrica's biodiversity corridors

in the Environmental Category, considering that it ticks all the boxes to be considered a good practice: it is innovative, fully transferable, focuses on the highly relevant topic of land-use change, delivers a solid restoration methodology and solution, and follows a collaborative approach.”

500,000 kilometres to preserve Europe’s fauna

“Turning power grids into biodiversity corridors is an opportunity to fight habitat fragmentation and to facilitate the mobility and dispersal of animal species as a way to respond to climate change”, declared Antonio Calvo Rey, Sustainability Director at Redeia, the group to which Red Eléctrica belongs. He also points out If transmission grids throughout Europe could implement our initiative, together we would generate a corridor up to 500,000 kilometres to preserve our fauna. RGI’s recognition motivates us to keep using our infrastructure for the benefit of biodiversity and we hope that it also encourages other TSOs to implement this good practice in their assets,”

‘Bio Transport’ results from the study undertaken by a team at Doñana’s Biology Station (EBD) of the Spanish National Research Council (CSIC), led by the main researcher Miguel Ferrer. The team developed an experiment to determine whether the bases of electric energy transmission grid towers could be transformed into biodiversity reserves for small animals.

Therefore, they take as starting point that the most common response to climate change are changes in the distribution of species. However, landscape fragmentation compromises their distribution. Thus, they analysed if the management of the habitat located on the base of electric energy transmission grid supports would increase the local richness of species, and saw that the density and diversity of invertebrate species and small mammals was growing, as well as the number of birds and bird species, increasing local biodiversity.

According to Miguel Ferrer, “we suggest that modifying the base of electric towers would facilitate the connection of populations. This idea would be easily applicable in any transmission lines grid anywhere around in the world, allowing for the first time to build up continental scale networks of connectivity. Such system would improve connectivity, by providing a network of habitat corridors or trampoline parches which, today, is a key concept in conservation biology and landscape

The study, titled ‘Transporting Biodiversity Using Transmission Power Lines as Stepping-Stones’ published in ‘Diversity’, was funded by Red Eléctrica and counted with the collaboration of the Applied Ecology Group at EBD/CSIC (consisting of Miguel Ferrer, Manuela De Lucas and Elena Hinojosa) and the Oregon Cooperative Fish and Wildlife Research Unit in the Oregon State University, Corvallis (with Virginia Morandini).