



Installation of markers on high-voltage lines leads to 75% fewer bird collisions

Installing markers on high-voltage lines leads to a sharp drop in the number of bird collisions, according to a Natuurpunt study commissioned by Elia. Markers ensure that birds see a high-voltage line sooner so they can avoid colliding with it. Natuurpunt monitored an overhead line in Noordschote before and after markers were installed. The findings are clear: after installing markers, the number of bird collisions plummeted 75% to 95%. Elia plans to continue its efforts and aims to install markers on about 200 km of the highest-risk high-voltage lines by 2030.

Installing markers on high-voltage lines works

Elia commissioned Natuurpunt to investigate whether the number of birds colliding with high-voltage lines decreases after markers have been installed on the lines. Natuurpunt volunteers walked under the high-voltage line in Noordschote eleven times in 2001 and 2018, looking for birds injured or killed as a result of colliding with the high-voltage line. At those times, markers had not yet been installed and 30 and 113 dead or injured birds were counted. After the markers were installed on the line, Natuurpunt repeated the exercise in 2021 and found only six casualties.

The number of birds present during the counting periods was also taken into account. These figures are available thanks to the annual waterfowl counts that take place in the Yser valley through which the power line runs. Without markers, between 14 and 42 casualties were expected, but in fact, only six were found, a decrease of 78% to 93%. A decrease of 75 to 95% was observed among songbirds compared with the monitoring period before markers were installed.

In other words, it is clear that installing markers significantly reduces the number of bird casualties.

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We are delighted with the findings of this study and hope this will give Elia an extra incentive to continue the work. In the coming years, we also want to study whether some types of marker work better than others.

Dominique Verbelen, Natuurpunt

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Natuurpunt volunteers and Elia looking for dead or injured birds under the Noordschote high-voltage line

Elia installed markers on 36 km of high-voltage lines in 2021 and is continuing its efforts

Over the past year, Elia made a total of 36 km of high-voltage power lines more visible to birds by installing markers on them. This year's projects took place in the Rupel region, the Eau d'Heure lakes area. Elia is continuing its efforts and, as part of its sustainability programme, ACT NOW, aims to mark 200 km of the most high-risk high-voltage lines by 2030. The use of new technologies such as drones is also being considered, provided of course it can be done safely.

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Over the past year, we've made 36 km of high-voltage lines visible to birds, limiting the impact of our infrastructure on the environment. We'll continue our efforts next year, especially now that the Natuurpunt study shows how well markers work.

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Ilse Tant, Chief community relations officer



Installing bird markers in Schelle over de Rupel river and along the Ghent Canal Zone.

More information:

- *Study (in Dutch):* [\(PDF\) Vogels onder hoogspanning in België \(researchgate.net\)](#)
- *Press releases about bird markers in 2021:*
 - o [Elia makes overhead line in Ghent Canal Zone visible to birds](#)
 - o [Elia makes overhead line by Eau d'Heure lakes more visible to birds](#)

About Elia Group

One of Europe's top five players

Elia is Belgium's high-voltage transmission system operator (30 kV to 380 kV) and is responsible for electricity transmission there. We ensure that generation and consumption are balanced around the clock, supplying the Belgian grid with electricity and operating 8,896 km of high-voltage connections. As such, our group (bringing together Elia in Belgium and 50Hertz in Germany) is one of Europe's top five system operators. With a reliability level of 99.999%, we give society a robust power grid, which is important for socio-economic prosperity. We also aspire to be a catalyst for a successful energy transition towards a reliable, sustainable and affordable energy system.

We make the energy transition happen

By expanding international high-voltage connections and integrating ever-increasing amounts of renewable energy generation, Elia Group promotes both the integration of the European energy market and the decarbonisation of our society. At the same time, Elia Group is innovating its operational systems and developing market products so that new technologies and market parties can access our grid, thus making the energy transition happen.

In the interest of society

As a key player in the energy system, Elia Group is committed to working in the interest of society. We respond to the rapidly changing energy mix, i.e. the increase in renewable energy, and constantly adapt our transmission grid. We also ensure that investments are made on time and within budget, with a maximum focus on safety. When we carry out our projects, we manage stakeholders proactively by establishing two-way communication with all affected parties very early on in the development process. We also offer our expertise to our sector and relevant authorities to build the energy system of the future.

International focus

In addition to its activities as a transmission system operator, Elia Group provides various consulting services to international customers through its subsidiary Elia Grid International (EGI). Elia is also part of the Nemo Link consortium that operates the first subsea electrical interconnector between Belgium and the UK.

Elia Group is a listed holding company whose core shareholder is the municipal holding company Publi-T.

MORE INFORMATION: eliagroup.eu & elia.be



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