

# The Impact of Power Lines on Wildlife – A Literature Review and Experiences From the Field

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Power lines can have a significant impact on the environment, both during construction as well as during operation. Their greatest impact is in the so-called Right-of-Way (RoW) - area of regularly cleared and managed vegetation that runs under the power lines, and the width of which depends on various factors, including the voltage of the power lines themselves (Ituen and Sohn, 2010; Right of Way, n. d.).

We reviewed recently published studies on the impact of power lines from initial installation to active operation on various game species and other wild animals, as well as on the original environment. In addition to reviewing the research, we also studied some practical examples in Slovenia.

Power lines can have both negative and positive effects on the environment and animals, depending on the species involved. The main negative effects mentioned are their barrier and corridor effect, as well as habitat degradation and fragmentation (Bartzke et al., 2014; European Commission, 2018). Some studies have found that

proper management of vegetation under power lines can provide an attractive habitat for wild ungulates and many other animal species, therefore, power lines can also have a positive impact on the environment (e.g., Wagner et al., 2019; Hrouda and Brlík, 2021). We were able to confirm the latter when we surveyed selected locations in Slovenia – there were different signs of animal presence in the areas under the power lines which indicates that wildlife can also benefit from these sites.

**Keywords:** power lines, wildlife, habitat, environmental impacts

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# The Impact of Hydroelectric Power Plants on Biodiversity, With an Emphasis on Fish Species

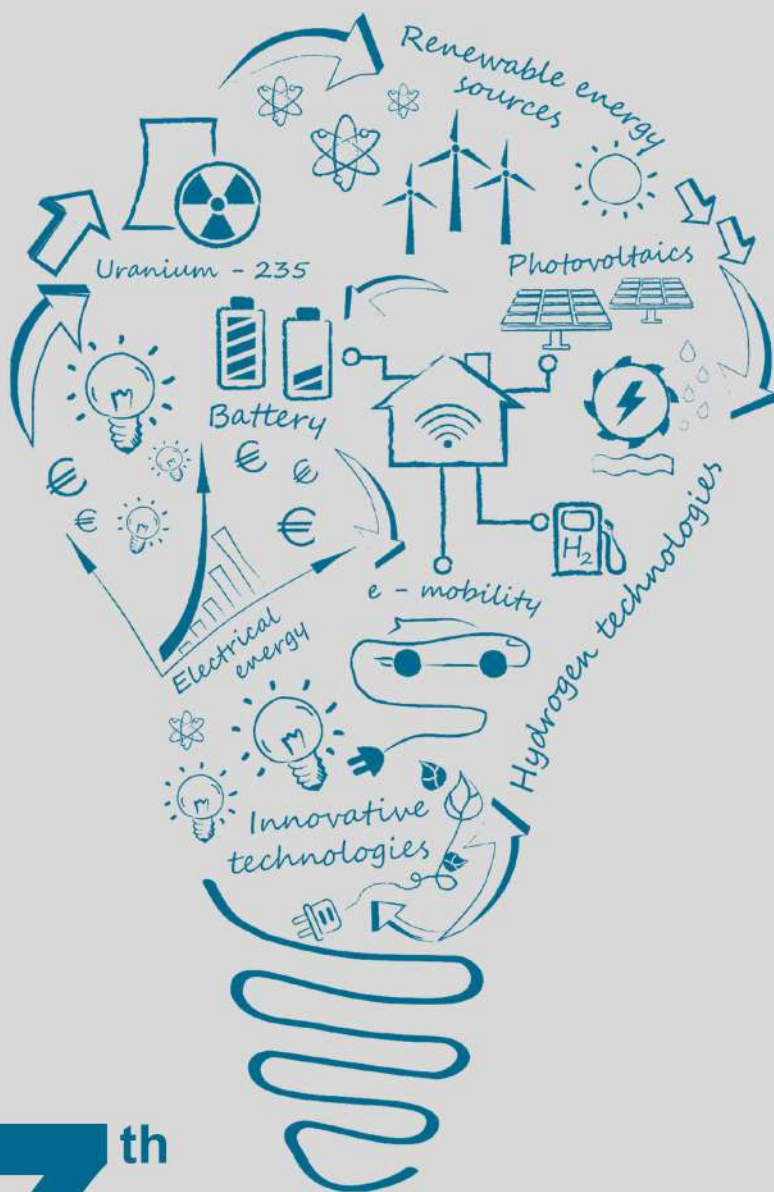
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Among the known sources of renewable energy, hydroelectric power plants (HPPs) are often promoted as low-carbon energy sources, but, in practice, their ecological impact on the biodiversity of freshwater ecosystems is considerable and well researched (e.g., Luangphon et al., 2025).

With dam construction it comes to river fragmentation, which changes the natural flow regimes of watercourses, interferes with the longitudinal connection, and impacts sediment transport—all of which are critical for preserving the ecosystem function, as well as the diversity of aquatic and riparian species (e.g. Ding et al., 2026).

These barriers interfere seriously with fishes' essential migratory pathways for feeding and spawning. By isolating individual populations, they decrease the genetic diversity of species and make them more vulnerable to predators. (Consuegra et al., 2021). There are also direct affects, like sublethal injury and mortality, that result from turbine passage (Algera et al., 2020).



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