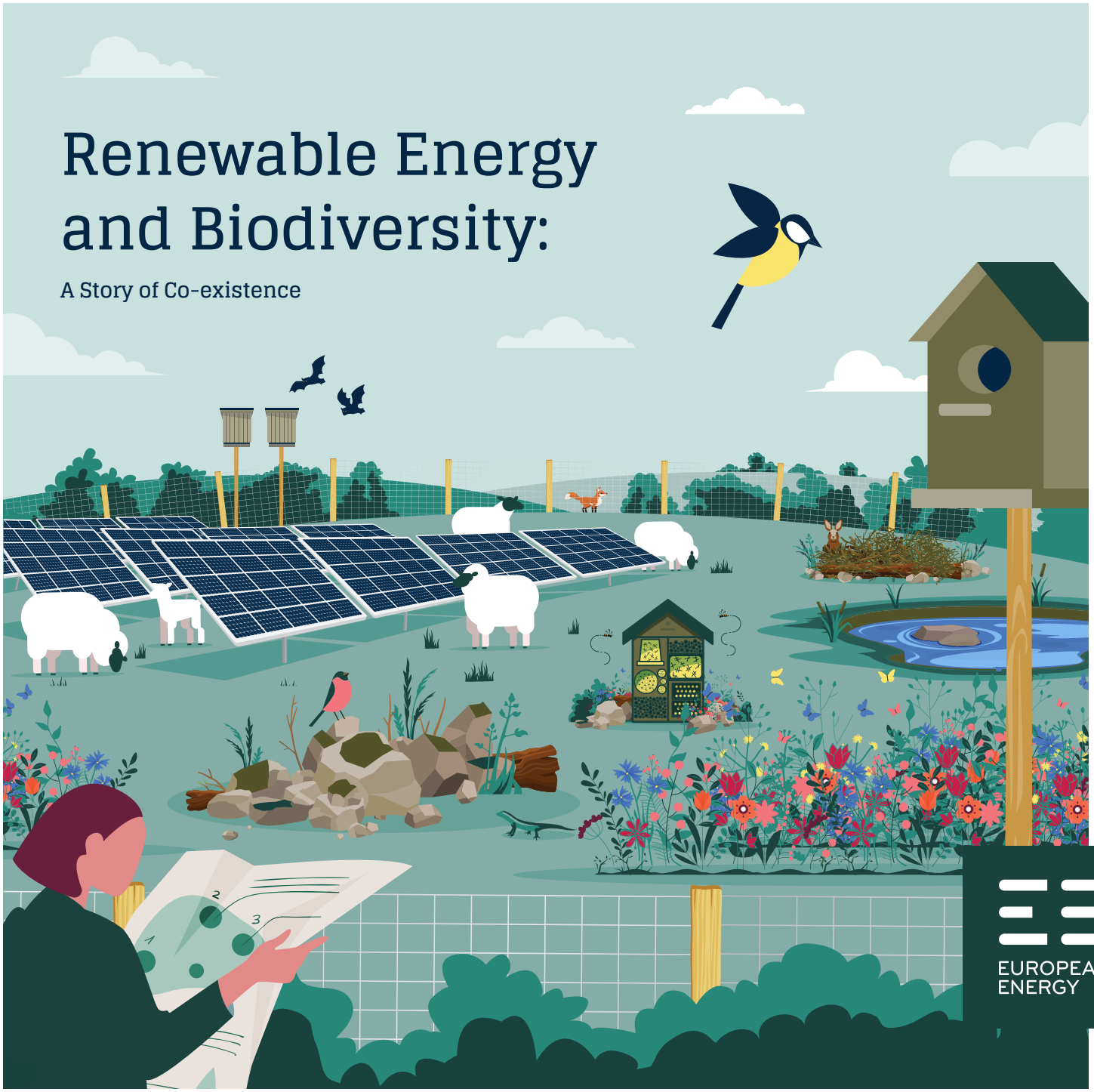
Renewable Energy and Biodiversity:

A Story of Co-existence



EUROPEAN ENERGY

Renewable energy is part of the solution

European Energy build solutions to prevent climate change. Simultaneously, we are committed to protect and improve biodiversity. Biodiversity is crucial in many of our essential needs in life. Hence, we support the global fight against the biodiversity crisis.

Intensive agricultural land use has led to a widespread decline in biodiversity and a deterioration of nature values in general. The intense use of pesticides and fertilizers, and the cultivation of vast areas with monocultures has a devastating impact on biodiversity.

The use of fertilizers and pesticides have highly negative effects on flora and fauna as well as human health. The use of pesticides is leading to biodiversity losses on farmland and the adjacent aquatic ecosystems. The use of pesticides is a direct threat to water resources.

Another stress factor related to the loss of biodiversity is the fragmentation of habitats that is caused by intensive cultivation and urban infrastructure development. By transforming agricultural land into solar parks surrounded by hedgerows and areas with wildflowers, we add steppingstone patches of habitats. This help reducing the consequences of habitat fragmentation, which is important for dispersal of species.

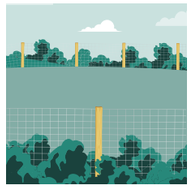
European Energy takes various initiatives, when planning for a solar park on agricultural land to improve biodiversity and overall nature values on and around the sites.

Knud Erik Andersen
CEO

Improving biodiversity and nature:

Grazed or mowed areas:

Grazing and mowing facilitate a more diverse flora community, with the positive result of more insect species. Removal of grass after mowing reduces the nutrient content in the soil, which eventually will improve the biodiversity. Mowing and grazing after flowering will also support pollinators. Keeping grazing pressure low will keep plant and insect variety high.



Planting of hedgerows:

Hedgerows surrounding the project area (typically width between 6-10 m) can improve the conditions for mammals, birds, and insects. These areas serve as feeding, roosting- and nesting areas. The hedgerows create connectivity between habitats and functions as corridors for wildlife. We seek to choose hedgerows of native bushes and trees and preferable fruit bearing species.

Avoid Pesticides:

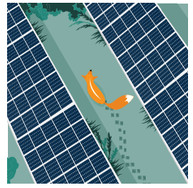
The pest control of weeds and insects reduces the overall biodiversity in an area. By avoiding the use of pesticides, a more diverse plant and insect community can be established. This will lead to an increase in food resources for instance for various species of birds. Additionally, removing discharge of pesticides to the aquatic ecosystem like rivers, streams and ground water will benefit flora, fauna, and human health.

Wildflowers/nectar seed meadows:

Dispersing wildflower seeds in the project area will attract various pollinators like bees and hoverflies. The new habitat will also attract insects, spiders, and beetles. Continuously management of the site is crucial to ensure that the habitat is not degraded by invasive weeds. We always seek to select native species.

Unmanaged areas

Areas without any management (besides controlled mowing to prevent the areas to turn into forests) can benefit the biodiversity. The surrounded plant species will naturally spread into these unmanaged areas and it will nudge the surrounding habitats to expand and create greater connectivity between habitats.



Fauna corridors:

Integrating fauna corridors reduces habitat fragmentation for larger animals. Small mammals like hares and foxes may still pass through or under the fence.

Piles of dead wood or stone:

Piles made of branches, logs and twigs, will provide habitats for various birds, insects and spiders. Stones will provide habitats and warm patches for various insects and spiders.

Avoid Fertiliser:

Fertilizers make the soil nutrient-rich, which favors a small range of plant species. Making the areas nutrient-poor facilitate a greater diversity of plant species. Thus, more mammals and insects. Discharge of nutrients to the aquatic ecosystems (lakes, streams, sea etc.) will be reduced and better water quality will benefit all living organisms - including humans.

Restoration and management of wetlands:

By removing drainage and allow partial flooding, various valuable habitats will be created and biodiversity will increase. Most important, the presence of water will reduce the emissions of greenhouse gasses like CO2 and methane.

Insect hotel/house:

Various structures can be placed in the solar park to provide shelter for nesting insects. A minimum depth of 20 cm of the structures is typically required for an optimal function.

Management of exisiting habitats:

Valuable habitats can be managed and restored to improve the existing nature. A management plan will ensure the conservation of habitats that have or will get poorer conditions.

Bird and bat boxes:

Boxes can be placed in the area or in the surrounding hedges to provide nesting and shelter opportunities for designated species of birds and bats. It is important to attract native bird species that can live in the local environment and do not affect the function of the panels.

Contact

European Energy
environment@europeanenergy.com

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